CHICAGO USERS GROUP

PRESENTS

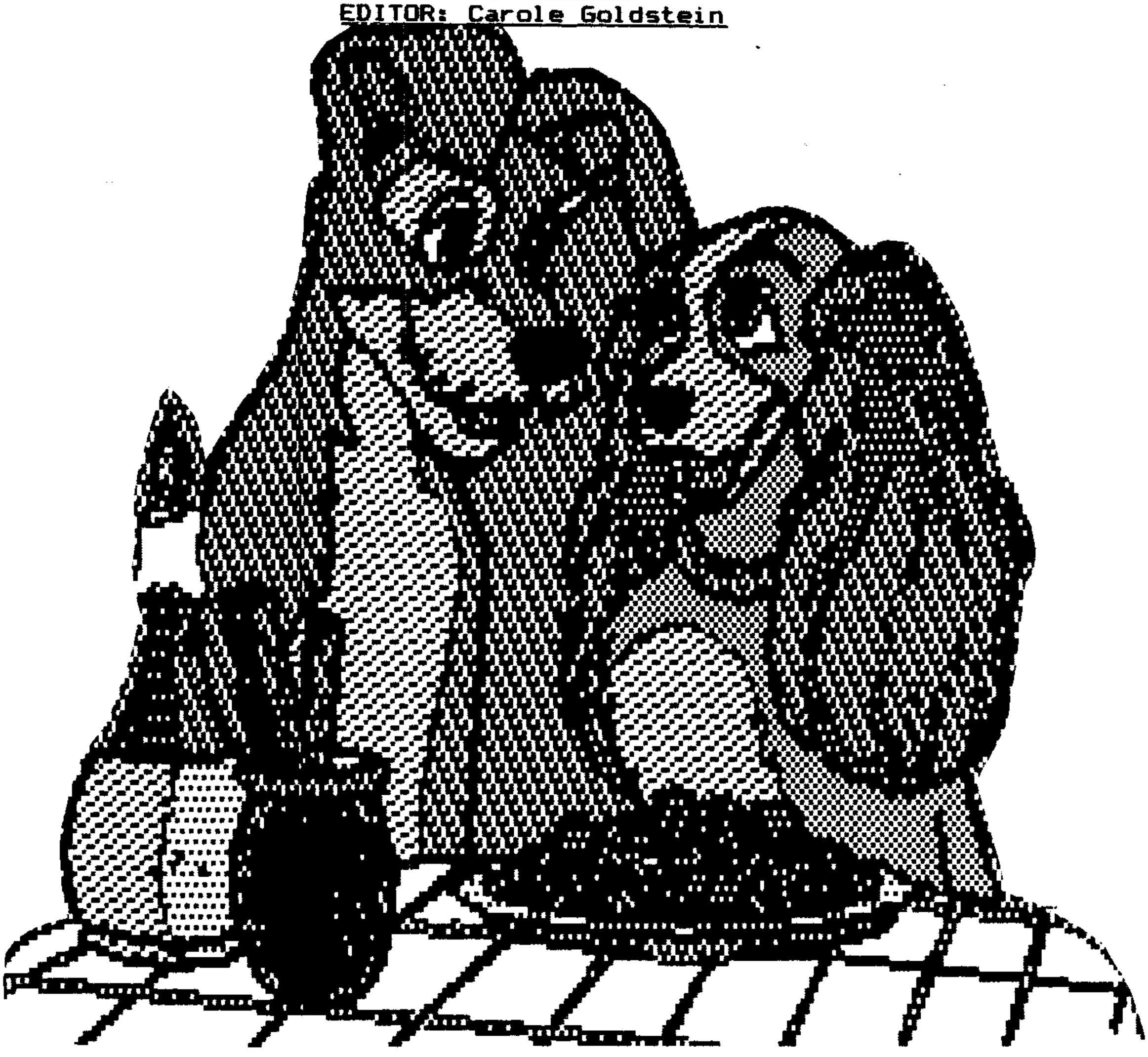
CHICAGO TIMES

NEWSLETTER OF THE CHICAGO TI-99/4A USERS GROUP

HAPPY NEW YEAR

DEC. 31, 1987

EDITOR: Carole Goldstein



THE JANUARY MEETING- - - - -

will be held on Saturday JAN. 9, 1987 from 1:00Pm to 3:00pm in the IRONWOOD ROOM at Triton College. Hope to see you all there.

IN THIS ISSUE...

THE DISASSEMBLY	Dave Wakely	Page 3
MEMBERSHIP CHAIRMAN SPEAKS	Don Jones	Page 6
BASICALLY YOURS	Rich Klein	Page 8
SOUNDOFF		Page 12
LIBRARY SHELF	Bob Demeter	Page 14
SOFTWARE REVIEW	Paul Farber	Page 16
SPADVENTURE #3	Dave Wakely	Page 19
BASIC ASSEMBLER	Steve Peacock	Page 22
HIGH RES GRAPHICS ON THE TI	Anne Dhein	Page 26
YOUR 9640 INFORMATION PERSON	Geneva Gabor	Page 30
GENEVE SUPPORT COLUMN	Don Jones	Page 33
LETTERS		Page 39
REMarks	Carole Goldstein	Page 40

COVER ARTWORK DONE ON MYART
Contributing artists: Buzz Krantz, Dan Gronowski, Danny Goldstein and Anne Dhein
Thanks to Dennis Hathaway for his proofreading expertise.

BULLETINS:

UG HOT LINE NUMBER IS (312)657-1093.

MEETING DATES FOR THE COMING YEAR ARE AS FOLLOWS:

JAN 9, IRONWOOD ROOM — MARCH 5, IRONWOOD ROOM

FEB 6, FIRESIDE LOUNGE — APRIL 2, FIRESIDE LOUNGE

WE WOULD LIKE TO START A GENEVE 9640 SIG. ANYONE INTERESTED IN HEADING THE SIG, PLEASE LET US KNOW. THERE ARE MANY PEOPLE OUT THERE WHO WOULD LIKE TO BE ABLE TO ADDRESS QUESTIONS. PERSON RUNNING SIG NEED NOT KNOW EVERYTHING. ALL WILL CONTRIBUTE.

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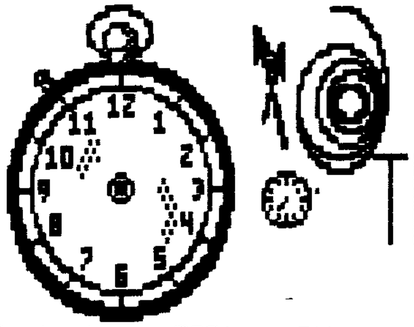


THE DISASSEMBLY

Dave Wakely

Endings Beginnings; DOSing; Other THings:

To us, December marks more than just the end of the calendar year. For Chicago TI-99/4A users it also means that the Faire is over and the elections have been held. 1987 will be the year of Hank Ellermann as President of our group, and we will all continue to somehow survive orphanhood for another year. The meetings will go on, the library will expand, and your computer will continue to do the things you ask it to do, and perhaps even some things you didn't expect it was capable of doing.

NEXT: Although it is usually in this column that it is possible to learn what will transpire at the next meeting, I currently have no direct access to this information. One of my more recent responsibilities with the group which I managed to shed was a place on the the committee which schedules the events at the meetings. Someone else can take the heat for awhile. Hopefully that information is contained somewhere in these pages.

BE A DOS BOSS: Every year it seems that I find at least one program at the Faire which impresses me as making some sort of significant contribution to the world of TI computing. It is hardly my judgement which renders the program significant, but more often something which others have also found important. This year I went to the Faire looking for "4A DOS", a program from Ryte Data which was reviewed in MICROpendium in June of this year.

What had intriguiged me about this program was its promise of direct control at the system level of some important functions. Those of you who have used an IBM or compatible are probably familiar with the concept of an operating system. What this means is that when the computer is booted up under DOS it goes to a system prompt and then waits for some action from the operator. It is from here that many useful functions such as initializing a disk or copying files can be done. The Basic language can be loaded and applications run in Basic, or programs written in Assembly or other languages can be run directly if they were written in a form which DOS recognizes.

TI users, of course, have traditionally had only the Start-up menu to choose from. If no cartridges have been installed, then the only choice may be TI Basic (this used to be universally true, but the advent of various cards, GRAM, GRAM KRACKER, RAM disk, etc. has changed that). Where a prompt did occur was in TI Basic or Extended Basic, where there are certain functions which could be done or Basic programs run which could do them. But there were many other functions which simply could not be done in Basic.

When TI Assembly language came along, there were more system-like functions which could be performed, such as initializing a disk, etc.,

without the need for a cartridge. Up to now, the Funlwriter enviroment has probably been the most used program for these system-level operations.

My first surprise on arriving at the Ryte Data table at the Faire was that there was no "4/A DOS". What they had was "COMMAND DOS". I guess they either feared copywrite infringement threats from TI, or figured that this name made a better pun (COMMANDOs, get it?). The original list price was $19.95, although you may be able to find it for less. For what it does, it's a bargain.

COMMAND DOS requires a Super Cart or other device which has RAM at >6000. This allows it to operate without disturbing the usual environment of the computer, and for C DOS to be reentrant under many conditions (meaning you can get back to it without having to reload it). There is a loader provided to get it into memory, and if the device is battery-backed, it will also stay there between sessions on the computer. Once loaded, the name "COMMAND DOS" shows up on the Start-up menu.

It seems clear that COMMAND DOS was designed to appear similar to the MS-DOS of the IBM world. The user is presented with a prompt and a cursor which permits entering a variety of commands. Roughly speaking, these can be divided into "internal" and "external" commands.

Internal commands are those which are resident to C DOS and which execute immediately. Some of them are: DIR (gives a directory of disks; TYPE (will print a DIS/VAR or DIS/FIXED file of any record length to the screen); PRINT (will print such files to the printer); COPY; DELETE; CLS (Basic's CALL CLEAR), etc. Some were pleasant surprises. For example, REF, which lists all entries in the REF/DEF table; and SETPRINT, which allows changing the name to be used by the print command. This is especially handy if you have a serial printer, since the default is PIO.

External commands will execute after the appropriate code is loaded in from disk. Some of these are: CHKDSK (will check the sectors on a disk for errors); DISKCOPY (sector back up of a disk); FORMAT (several formats are available depending on hardware); and EDIT40, which loads in the TI Writer editor. Even better, when you leave TI Writer you are returned to C DOS.

The division into internal and external commands is also exactly what goes on in MS-DOS. There are many more functions I haven't mentioned, and these alone would make C DOS worthwhile, but C DOS also does batch files.

For the uninitiated, a batch file is a "list" of commands, usually built with a text editor, which execute one after the other, automatically. Some MS-DOS users have dozens of batch files which perform a variety of functions. Now TI users can have them too.

The "syntax" of batch files and the related commands are covered in about two pages in the manual (more on THAT later), and there are some significant differences from IBM batch files. For example, C DOS has no labels and no gotos, but does have an ONKEY, which permits a single key input into a batch file, permitting branching. Also, more than one command can appear on a line, and batch files can call other batch files, and can even reload themselves! About five minutes after reading what was available and looking at the sample batch file included, I was able to come up with the following as an exercise:


```
CLS
ECHO OFF
SETPRINT RS232/1.BA=2400.DA=8
CLS
VER
REM
REM TI System Menu
REM
REM 1) Current Printer Info
REM 2) DIR DSK1.
REM 3) DIR DSK2.
REM 4) Help Info
REM 5) Return to DOS
REM
ONKEY 1,2,3,4,5
REM
P? WAIT BATCH TEST-BAT
DIR DSK1.  WAIT BATCH TEST-BAT
DIR DSK2.  WAIT BATCH TEST-BAT
MORE ON HELP WAIT BATCH TEST-BAT
ECHO ON
```

And that code produces the following screen (and executes the following functions):

```
Command DOS Version 1.0
(C) 1987 Month Schmidt

TI System Menu

1) Current Printer Info
2) DIR DSK1.
3) DIR DSK2.
4) Help info
5) Return to DOS
```

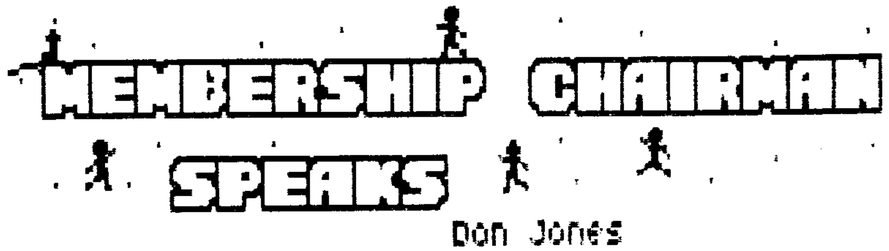
To complete the comparison with MS-DOS, this file, if named "AUTO-BAT" will execute on choosing COMMAND DOS from the main menu, much as an AUTOEXEC.BAT file does from an MS-DOS boot.

There are other limitations and problems with COMMAND DOS, not the least of which is the manual. Ryte Data comes up with some interesting programs, but can't apparently produce a decent manual for any of them. For example, the first page of my COMMAND DOS manual is missing the first two letters at the beginning of each line because of sloppy folding of the paper (which is why those two columns show up on the far right of my page 12). The text looks as though it were produced on a far-less-than-letter-quality dot matrix printer, and the amount of information is sparse. On the positive side, I have found no errors in what information is there, and I have only had to use the manual as a reference for seldom used functions on a few occasions.

All in all, the positives far outweigh the negatives, at least for me. A good counterargument can be made that this is just what some computers, such as the icon-based Macintosh, are trying to get away from. Still, if you are an IBM user, using DOS should be second nature, and the appearance of a highly similar way of interacting with a computer makes the "learning curve" for this program fairly short.

In the current issue of PC magazine, one of their columnists defines the term "neatness", when applied to computer programs, as arising from the initial response of users to seeing it. As when you first boot up a program and say, "Hey, that's neat!" Under this definition, COMMAND DOS is neat, not to mention useful. As with their BASIC compiler, I hope we see an even better Version 2 Real Soon Now. In the meantime, this will do nicely.

SubrouTInes: I'm all out of Other THings and material for this month, but note that the Spadventures have once again gotten off the ground somewhere else in this issue...



Don Jones

Hi there twice, Sports Fans! I bet that you didn't expect to see me here again in this column. Well, I'm back; There were a couple of things that I felt that I should pass on to all members before departing for good, at least in this capacity.

As I mentioned to you last month, I have relinquished my responsibilities as the membership chairman. Instead, I will devote my energies to being the vice-president of our group and to writing support columns for my new love, Geneve. But, before departing, there are a couple of things that I would like to say:

First, I would like to thank all of those individuals who have supported me in my job as the membership chairman: I thank Sandy Bartels, our outgoing president, for both her support and confidence. I thank Al Stump for doing the back issues for me, while he was able. I thank Harold Shanafield for taking it over from Al, when he was no longer able to do it. (Speaking of Al, he regrets that, due to extenuating circumstances, he is not able to submit a Hard Times article this month. I hope that he will be able to continue with it next month.) I thank Ruth Piepgras for having entered the new member information into the group's data base, when she still had her TI (which was before she gave each of her two systems away to each of her children, one who is presently in college and the other who is contemplating marriage). I also want to thank my neighbor Irv Levinson for continuing to make up and send out the membership packets to the new members of our organization. I thank Tom Wandrey, the man whose name I could not remember, who helped me on the doors at the Faire, and who copies the sample tapes, that go out to those new members who are still dealing with cassette tapes. I thank Alan Izzo for continuing to send out information to those individuals who who request it. I thank my buddy, Jan Joel Janowski, who used to take care of my correspondence, when he was able. I thank Rich Klein for taking over the leading of the Beginners' S.I.G. I thank Paul Farber and Ken Knapp for having helped me man the membership table, before and during the group's meetings. I want to thank Jim Dreards for his general support during the year and especially at the Faire (this is another individual whose name initially escaped me. Also, I can't forget to thank all of you who have cooperated with my requests, in my capacity at the membership chairman.

As you can see, it takes a lot of people to make our group run. Also, can you believe that, at one time, I was doing ALL of that? I guess that it's my fault for expanding

the role of the membership chairman so much, but I found it to be necessary in order to service the larger number of people, whose memberships I solicited in one way or the other.

You must also remember that as a non-profit organization, NO ONE get paid for any of his or her services. It is truly a voluntary organization. This is why I sometimes get a little upset when I am constantly hearing certain people demanding service. Listen, Sports Fans, the yearly membership dues don't even pay for the complete cost of the printing of the newsletter! I bet that most people didn't know that; well it's true. It's through the subsidization of our group, through other activities like the Faire and the library that we are able to continue to serve you. What I'm saying, for the last time, this year, is that WE STILL NEED HELP! I therefore request that you please come forward and volunteer. Please don't just sit around and demand SERVICE. Also, you don't need to know ANYTHING about computers to be a volunteer. You also don't need to have been around for very long. (At this particular time, I need some additional help on the membership table for before and for a little while during the regular meetings. If someone would please come forward and volunteer to be the membership table chairman, who woule merely coordinate this activity, it would be deeply appreciated. You won't have to take any of the responsibility home, except to make copies of the sign-in sheets. If we could then get three or four additional people, who will help at the tables, on a continuing basis, we will have more than enough, and no one person or small group of people will be stuck with the burden of the table.

Also, we have decided to change the data base which the group uses for the names and addresses of its members. We will need a few individuals who will be willing to do a small part of the entering of the names. In this way, one person won't be stuck with entering 800 names, addresses, and telephone numbers. The data base which we will be using will be PR BASE. We have more, or less decided on this one because of the fact that it is flexible, and it is also Geneve/TI 99/4A compatible. I realize that this data base has constituted a problem for a lot of people. Nick Iacovelli, an assembly language whiz, has set the data base up for the group, so that we can begin to enter the information. Even though he has already done this set-up work, I will still be teaching myself how to use the program, so that I will be able to modify or adapt it, if necessary. I also feel that being able to set up this significant piece of software will make me better able to take advantage of all of its many features. I will then be having a short-term S.I.G., devoted to how to set up and get started with PR BASE. I hope to be ready with this so that the first meeting can be held after the regular January meeting. Anyone, who wants to use this data base will be welcome. Copies of it are available in our library. As this a "fair ware" program, I would also like to take up a collection, from all those who attend the S.I.G. The proceeds will be sent directly to the author of the program. I will later give a S.I.G. on John Birdwell's Disk Utilities program. I used it for the first time yesterday, and I am very impressed. A collection, for the cost of this program will be taken up at that S.I.G. also. Incidentally, it is both TI and Geneve compatible.

Speaking about volunteers, we have some new individuals who want to do their fair share towards making the group work. We now have on board, Camille Robinson. Camille will be managing the data base, of the group's name and addresses. Camille happens to be an electronic engineer. She is now becoming more active in our group. One important thing that she is doing is providing service to people with disk drive problems. She is also helping people to expand and set up additional peripheral drives. By the way, we still have some of the peripheral, external disk drive boxes, which our group is selling for $20.00 apiece. At that price, they are a great bargain. Camille is also able to help members to set these peripheral boxes up. (They are not to be confused with the TI peripheral expansion boxes, as they do not hold any cards. Rather, they hold disk drives, hard drives, and streaming tape back up cartridge drives.

Also, we have some special news: We have a new membership chairman! He is Matt Mullen.

Matt stepped forward at the end of the last meeting and said that he wanted to make a contribution. I have described what his duties would be, and he is very anxious to take on the challenge of the job. Welcome aboard, Matt. It's good to have you here!

Well, Sports Fans, I guess that that about it. In closing, just remember to renew you memberships before January 1, so that you can take advantage of the $3.00 discount. Remember, after January 1, the cost of all new domestic memberships will be $21.00. Foreign memberships will remain $24.00. The cost of membership renewals will remain the same. All that we are doing here is getting rid of the attending and non-attending categories. Also, remember that we will no longer be sending out back issues to those members who renew late. The only people who will receive back issues will be the new members. And speaking of back issues, we still have some issues left. Drop a line to our p.o. box if you wish to order any. Your letters should be directed to Mr. Harold Shanafield.

Once again, good-bye to all you sports fans, as the membership chairman. Happy Holidays to everyone. So long, and thanks for all the fish!

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files externally. Here's what to do:

First, your E/A module is not in its normal place. When you followed instructions to set up your X/B-E/A module, you moved it to Gram 7. so go into the GK loader's memory editor and press F1 to get to Grom memory. Then type gE658. There you'll see 06 F4 60. This is a CALL to the Grom location that Danny Michael placed the code to move the E/A code from Groms 1 and 2 to the 32K and execute it. The idea here is to replace this code with the original code so it looks to a drive for those files.

To do this, flip up (or down) the W/P switch, press F9 to place the cursor in the memory window and type the following code:

```
gE658 08 8B A1 14 4C 6F 61 64 20 41 73 73
gE664 65 6D 62 6C 65 72 28 59 2F 4E 29 3F
gE670 20 FB 06 E7 9F D6 75 0F 60 5A D6 75
gE67C 4E 60 5A 06 E5 B2 E6 28 06 E5 D4 BF
```

This should be accurate. This replaces the code that was altered and you should now be able to load from disk as originally set up. If you are using a Ramdisk and want to load the utility files from that, then change the location gE61E to reflect the Drive name and number (DSK5.). Make sure that its length is EXACTLY the same length as what was there. If you do this, then you will have your cake and eat it too as your files will load as fast as if they were loaded from your GK.

Once you've gotten that out of the way, you can go on to fix the formatter disk file. When the Formatter is loaded, it performs a module check to see if the TI Writer module is at Grom Address >6000. If it is not, which is the case here, it Branches through the power up vector and resets the 'puter. To eliminate this annoyance, Craig Miller has the following fix. Find the FIRST sector of the Formatter file with a disk sector editor. If you look at the 34th and 35th byte of this sector, you will find a Hex 1000. Change this to Hex 1011 and you're done. Make sure you rewrite the sector to disk, or it will remain as before. This fix bypasses the module check and runs the Formatter.

If you want to load the TIW files from Ramdisk also, then use the Search function (F5) of the GK memory editor to find DSK1. and change it to whatever you want as long as its still the same length (DSK5.). There is more than one DSK1. The one you want precedes the filenames associated with TIW, such as CHARA1, EDITA1, EDITA2, FORMA1, and FORMA2. That's the one to change. This is also in the book, but I did that one on my own.

I also went through the entire module space and changed all the uppercase words to upper and lower case, including the Show Directory function, which, although it is accessed through the Editor, is actually resident in the module. These changes are purely cosmetic, but they do change the Flavor of your module and make it stand out from the others. I also changed some of the prompts on the main TIW Menu screen, including the TI copyright just to show the difference between it and the original.

Another problem with TIW that crops up is that there are a LOT of foreign language versions that show up on the main menu screen. When

you have the Loader, Extended Basic, and the Editor/Assembler on the screen, this can screw up the menu screen formatting. The original TI format allowed only nine items double spaced on the screen. If you exceed this, then strange characters appear on your screen. If you did not modify this screen format, or just want to eliminate the Foreign languages from the menu, then change the address at >4006 to >40CB This points directly to the English version of TIW and bypasses the rest. At this point, your Menu screen will have only TI Writer, X/B and E/A on it. If your loader switch is on, it will be there also.

For those of you who do not have GK's, but have another type of Gram Device that does not use the module port, such as the Gramcard, then there is an easy way for you to do this. The only requirement is that you are on speaking terms with a GK owner. If you are then have him come over and plug his Gram Kracker into your console and load his previously saved files with the previous patches on them. When he loads them into his GK, they will also load simultaneously into your Gramcard. Then just save them to your own disk and you are done.

Also, there is a way to battery back or apply external power to your Garmcard. Contact Franz (Frans?) Waggenbach of T.A.P.E. for instructions. There is also a way to make your Gramcard into a Ramdisk. If you can do both of these and retain your Gram Emulation capabilities, then you can combine all the above features on one card and KEEP it there when you turn your system off. If so, that would be great for you.

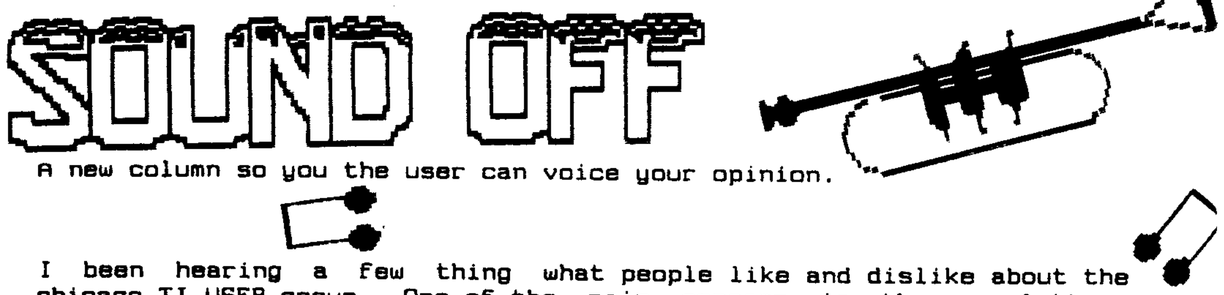
There is much more that can be done with your GK. I've only oncovered the tip of the iceberg, so to speak. If you want to do more, the GK allows you to program in GPL, which, by itself, is respectably fast and easy to learn, compared to Assembly. The intern book, a GPL Assembler, and disassembler are all that is required. If you look around, there is more than one version of each around. I know of three disassemblers alone. There is an unfinished one by Paul Charleton floating around, a nice one written in Forth by Craig Miller, and I believe there is one marketed by Ryte Data. Ryte Data also has an Assembler, loader and Linker as well. If you don't get these, the Kracker Facts booklet alone is enough to keep you busy for a long time. Not only do they have fixes there, but they also have tutorials on interesting aspects of the GK, and the source code to the GPL CALL CAT routine and others as well.

I've devoted this column to the GK this month, because I haven't seen too much on it in the periodicals I've come across> to those of you who don't have one, there may be a new GK clone available soon, called the Gramulator. This is functionally identical to the GK except for some switch changes. Also, there wil be Gram capabilities on the hopefully soon to be released Grand Ram card. If they come to be, They will provide some useful functions for all of us.

If you have a GK, or can convert GK files to your Gram device, I may have the necessary files on the Group BBS at (312) 966-2342 or Hank Ellerman's Chicago Connection at (312) 453-7831. I can't guarantee this, as I haven't done so at the time of this writing, but I will try.

To all of you, I hope your Holidays were the best and I hope to see you at the next meeting.

(I almost forgot. To Mr. and Mrs. A from Palm Bay FL, I will send you one of the kits. I hope you can find someone you can rely on to make the necessary changes.)



A new column so you the user can voice your opinion.

I been hearing a few thing what people like and dislike about the chicago TI USER group. One of the main concern is the newsletter. Most of you dont like TEXICINA. You dont like her taking potshot at the users. She was made for fun. If you join the group when Stephen (or stephanie as I called him him.) Meyers and I wrote article. Every article contain a good friendly nasty remark at each other. It true we did it with a vengeance. We try to top each other each month but this made writing the article fun. While all this was going stephanie and I always talk to each other on the phone still downloading programs and helping each other out. And you people let Texincia and her remarks get to you. How many of you have friends and colleague at work who in just fun make a remark about you. One of the most common things people say after you call in sick and show up the next day is " Hey ------ I hope it was good.". Then you usually reply,"It was for me". Remarks like these made me and Stephan keep writing article. Our article was always informative even with the remarks. Most of the article written for the newsletter are written on a voluntary bases. They wont get written unless the author enjoys writing it.

Another thing is the newletter editor isn't getting paid she doesn't have time to edit any nasty comments or to read all articles submitted. Remember this is a group.A group of people with different opinions. The newletters is not a magazine,it not a business to be run. It a suppose to be a fun semi-serious booklet of information. Texicina was there for enjoyment only and was probably the first column you read. If you dont like what in the newsletter then write your own or take over the current one(I am sure carole tired of it by now.) Rebuttal to this article can be submitted to this column heading thru the user group bbs or on disk in TI-writer format to the user group P.O box. These article may or may not be printed(power of the press,freedom of speech not if say so I am taking control of the group.I am declaring myself dictator.
First step take over the media and write some good propaganda.). If you do write a article to SOUND OFF dont get long winded and take up 3 or 4 pages of space and say nothing like one member I know.(I wonder who this could be.)

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A RIP OFF ALERT!!!

I thought that the TI community should be made aware of an unfortunate experience which I have had this last summer. Because of my preoccupation with this year's Faire, I have not had the opportunity to pursue it more thouroughly, but, now that I am free, I intend on dealing with this matter as fully as possible.

A year ago, this last summer, a member of our users' group, and the TI community, left a message on our users' group's board. He said that he had replaced the fan in his peripheral expansion box. He ordered his fan from a company in Townsend, Maine, called Statco. He said that he was very pleased with the improvement as the replacement fan was much quieter than than the original fan which came in his p.e. box. His replacement fan cost him $18.00. I kept a copy of his message on my wall for almost an entire year before I was ready to order a fan.

Because of the long length of time that had transpired, since I had seen the message on the board, I decided to be safe and write to the company to make sure that the same fan was still available for sale and at that same price. I therefore sent off my first letter, early in the month of May, inquiring about the availability of a fan for the TI p.e. box. I later received a letter, dated May 27, 1987 and signed by a Paul E. Johnson; he signed as the president of the company. This letter stated that the original fan was no longer available, but a substitute was available at the higher price of $23.50 plus a $2.50 charge for shipping.

In the month of July, I sent in my check for $26.00 with my order for a p.e. box fan. It was my hope to receive my fan during my vacation time, so that I would be able to install it during that time. I waited a month, and no fan arrived, though my check was cashed. On August 15, 1987, I sent my first letter inquiring about the whereabouts of my fan. To this letter I received no answer. Subsequently, I sent a total of five letters inquiring about my fan. None of my letters were answered. I then tried to call the company by telephone, but I was informed that the phone had been disconnected. When I sent a certified letter to Statco, Inc., with a request for a return receipt, my letter came back, marked, "UNCLAIMED."

On the basis of my experiences, as stated above, I feel safe in saying that it appears that Statco, Inc. is no longer functioning in good faith. It is my recommendation that all members of the TI community be aware of my experiences and act accordingly. I will be writing the Federal Trade Commission, the Maine Jr. Chamber of Commerece, and the Better Business Bureau, relative to my experiences with Statco, Inc. If anyone, who lives in the Maine area, can give me any information, relative to Statco, Inc., I would be very appreciative of receiving it.

Don Jones

EDITORS NOTE: The attorney general's office has been contacted to try to resolve this situation.

library shelf

— Bob Deneter —

Jingle Bells, Batman smells, Robin laid an egg. Hey there, how was your Christmas, Holiday or whatever? Mine was GREAT!!! I got myself everything I wanted. Yes, everything is great. Snow in the air, mistletoe , and holly. Ah yes, Holly, sweet Holly. I was 23 when I first met Holly. But wait, I'm getting carried away here. Put me down!!!

Let's get serious. But only for a moment. First off, let me publicly congratulate Hank Ellermann, (Dandy?) Don Jones, Len Rovner and Marcy Brun on their landslide victories. Their respective positions are President, Vice President, Treasurer and Secretary. I know they will all do a great job. They all have much concern and love for our group.

Again on a serious note, let me make a correction. Last month I made some statements about changes in library orders. On a very realistic basis, it will be very tight trying to get volunteers to fill orders within 2 weeks. Besides our full time jobs, all 4 of us either have another part time job or go to school. Large mail order houses that employ full time people state 4-6 or 6-8 weeks for delivery. It is not fair to expect anything more from a volunteer. Please allow us an average of 6 weeks to fill your orders. It is only fair to our volunteers that work so hard and would like to enjoy their families from time to time. I know my wife wears black constantly. I'm on the computer an average of 48 hours a week. As long as she can be a widow without any real burials, it's alright by me. I love this machine and I love collecting programs.

Another apology is needed. At the Dec. meeting I reported that as of Nov. 21 I had mailed out the last of the library back orders. On Dec. 12 I found this was not true. I found about 7 orders from late Oct. that had not been processed. I want to publicly apologize to Bill Harms, Mr. Wetherill, John Thomson, Walter Ward, George Lett, and Jeff Rudolph. Somehow your orders were overlooked. Actually they were put in a bag by my wife cause I left them on the dining room table too long. Now that I have my new filing cabinet, I file everything right away. So, that shouldn't happen any more. Please accept my apology. Your orders are beings processed straight away.

Hey, has anyone seen disk 101? I have. And for $4.00 you can too. We have a real nice collection of programs on it. One of the nicest ones is the ALIGN program. Using this program and an alignment disk you can check the head alignment of your drives. You can also use the program to check the speed of your drives or just run them while using a disk cleaner. Also included on the disk is the TI vs series. TI vs Atari, Apple and Commodore. Watch the TI logo take on all comers in SORRY ATARI, APPLE JAM and CRUMMY COMMIE. TI proves once again it's #1. I found an ELIZA program that was modified by Mike Maksimik. It's on there. You'll also find another nice WHEEL OF FORTUNE game. It's very nicely done. It has it's own PUZZLE file which you can modify. 2 other programs included are SHOOT OUT IN SPACE (SOS) and XBOPT5 by Barry Boone. XBOPT5 can be modified to load any of your E/A option 5 (program image) files from Extended Basic. Like I said, the disk is full of really nice programs.

After the Dec. meeting, a ton of raving women led by Joe Podszywokom stormed the library table looking for our GENUTILS. Please let me explain that this is the Geneve Util program. I will call it by a new name, GEN/UTIL. It is in the 9640 Support library and not part of a private library. That should make your wife feel better, Bill.

OK, that squared away, how about a disk 102? If you want it I can do it. I have a few

nice games here. Most ofthem are from the Mid-South 99er User Group. How's your math? 23 MATCHES will challenge you real good. You have 23 matches standing. Play against the computer and try subtracting matches. Whoever gets left with 1 match looses. Here's a game called BALLOON. Try to puncture the falling balloons before they fall thru the hole. The higher your score the smaller the balloons get. I liked this one. Have you ever wanted to pilot a blimp? Well, here's your chance. BLIMP let's you fly around some skyscrapers trying to rescue people. Watch out for flying witches? And the buildings. It's really difficult to land in just the right spot. A real challenge. Very nicely done. BLIMP is on disk 102. Here's another WHEEL OF FORTUNE game. This one will let you run pre-made puzzles or have someone not playing make them up. Puzzles can be made for any of 9 catagories. TRIVIA anyone? This one is really pretty neat. It has all sorts of odd questions that challenge the mind. Danny Cox, you did a great job on this one. As stated earlier, most of these programs came from the Mid-South 99ers. Here are 2 more nice programs. MSUG-LABEL and MSUG-LIBRN. The label pgm. prints out a label that says PROPERTY OF in Emphasized mode. It then prints out your name, address, city, state, zip and phone number. It also asks for a 10 character disk name. You can alter the name and address info at line 42 I believe. MSUG-LIBRN will catalog up to 750 filenames. It then sorts them out and prints them 3 across the page. Information includes Filename, Diskname, File length and File type. No, I'm not done yet. There's 1 more program on the disk. WOODSTOCK is a Christmas present from Ray Kazmer. I did not have a copy if it before the Dec. meeting. This is by far one of the most ingenious pieces of work I have even seen. WOODSTOCK is to graphics what BERT ERNIE is to speech. Poor ole Woodstock is up to his eyes in trouble again. Snoopy and Charlie Brown has gone off to Grandma's house for Christmas. But good ole Snoopy remembered to leave Woodstock a Christmas present. What happens to Woodstock while trying to retrieve his gift should never happen to anyone. You simply must see this program to believe it. It is truely worth the price of the disk.

Some of the programs on disks 101 and 102 are fairware and some are not. I'm sure you will make a donation to these authors to keep them enthusiastic about writing programs for our machine. Here is a short list of authors that have programs on disks 101 and 102. Stephen Hollis wrote 23 MATCHES and BALLOON. Doug Hollis wrote BLIMP. Gerald Smith wrote MSUG-LABEL and MSUG-LIBRN. One WHEEL OF FORTUNE game was written by E.B. and James Johnson. The other is by Andrew and Chris Kirmse. The TI vs programs are by Nnameka Egwuekwe. SHOOT OUT IN SPACE is by Tom Long. TRIVIA is by Danny Cox and WOODSTOCK is by the great Ray Kazmer.

I have in my possession, a flippy from Ray Kazmer. It contains several really nice programs. I haven't had a chance to go through all of them. Next month I'll be sure to review them for you. They should make 2 great additions to our growing library. I do remember his TEX-RANGER and FORESTFIRE programs. FORESTFIRE is a modified version of a program written by John Behnke. Ray also sent us his updated version of CANNONBALL CHESS. More next month.

I got around to reading the docs to PICASSO this month. I've played with it very little. But, from what I see, it's a very well done program. Matter of fact, it's great. You can change brush sizes, texture, draw circles, boxes, lines and rays. You can even add text to you creations. Also, PICASSO will let you use your TI Artist pictures. Use the entire picture or overlay it on your creation. It has windows you can move around and a zoom mode. You can leave the drawing mode to catalog a drive or dump your picture to a printer. I will play with PICASSO a little more and report back next month. Till then you can still get it from the Fairware library for $2.00.

Paul Charlton has been playing (working) with his 9640. He's given the Geneve world a GIF program. We can now use graphic pictures created by the Amiga and Atari. All of these beautiful pictures can be run on the 9640. You can even load them into My-Art. Some of the pictures are 512 pixels by 256 pixels and 256 colors. Some look lifelike. I am placing 3 new disks into the 9640 Support library. GIF2 will include version 2 of

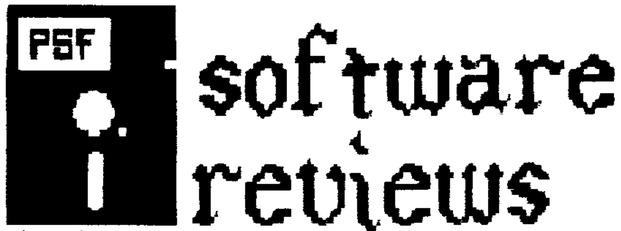
Paul Charlton's GIF program. It is fairware. Also included on the disk will be a complete set of docs and 3 pictures. The second disk GIF/PIX1 will contain GIF pictures as will GIF/PIX2. Here is the picture list.

GIF/PIX1 will have TIGER, ODIE, MARRY, BUGS BUNNY, and AMIGA FUN. GIF/PIX2 will have GORILLA, PRETTY, MAZDA, and PIPE. All these pictures are great. Tiger, Gorilla and Pretty are among the best. Tiger is 255 sectors. Pretty is 157 sectors and Gorilla is 105. The detailing is really something.

Well I'm gonna scoot on outa here. I'll let you get back to your holiday time festivities. It's the new year now. Lets start things off right. HUG your TI tonight. HAPPY NEW YEAR everybody!!!! See you at the meeting. That's if I make it back from Calif. alright. Catch ya later. Bye bye.

P.S. Don't forget the Fairware and 9640 Support library listing is now on disk. All the current software as of Dec. 5th. is listed. Just ask your friendly librarian for the fairware list. Still only $1.00.

PAUL FARBER



December 1987-This month I am going to review two software packages which will aid your efforts in creating good Basic and Extended Basic programs. One of these is Fairware (TI-KEYS) and the other is a commercial offering (EZ-KEYS). Both of these programs work in memory space not normally used by the computer so that you can create programs with both of these systems sitting there to assist you.

TI-KEYS first; This is available from our Fairware Library or you can order it from Wes Johnston, 404 Furman Lane, Ladson, SC 29406. Wes is a high school student who is asking for only $10.00 if you like the program and intend to use it. TI-KEYS allows the user to define 36 keys (A-Z and 0-9) along with the control key they will display up to 31 characters of text or code. A menu, activated by pressing control = will give you 5 options;(1)EDIT Keys; (2)SAVE Keys; (3)LOAD Keys; (4)TURN OFF KEYS, and; (5)RETURN TO BASIC. Entering the EDIT option you will be asked which key you wish to change. Upon pressing one of the keys (without the control key) you will see its present value and be allowed to modify its meaning. After you have modified the keys to fit your needs, a control = will return you to the menu and you can save this particular set of key strokes to disk. As you can see this will allow you set up different sets of macro's (that's what they are after all) and call them up as needed. Perhaps one set can be your Basic or Extended Basic commands and another can be a set of redefined characters for a new alphabet set or some sprite definitions.

The disk comes with a nice (all be it short) set of documentation and the COMPLETE source code. This code is 13 pages long when printed out and contains liberal comment statements (something that I heartily recommend for all programs that will be read by someone other than the author) so even an assembly idiot like myself can half understand what the code means. I recommend that the programmers in the Users Group should take a look at this package for some good innovative programming (I will have some information about programming later in this column.

The other program I am going to tell you about is EZ-KEYS by Harry Wilhelm (ASGARD Software, P.O. Box 10306, Rockville, MD 20850) with a suggested list price of (I believe) $19.95. Like TI-KEYS, EZ-KEYS will "program" your keys with a set of "macros" to make your programming life easier. Unlike the former program EZ-KEYS will let you program up to 55 keys (all of the Control key presses plus the Function key presses of 0/YQHJKL;BNM, and .. These macros may be stored, just as in TI-KEYS and called up as they are needed with two differences. The first is that the macros may be up to 668 characters in length and contain all the "normal" function key presses, plus the arrow keys and the ENTER key. The second is that these macros can contain embedded macros, which call upon other macros. These macros are constructed with a Macro Editor which is called up by pressing Function 5. At this point the screen will clear and any macros already defined will be shown. In order to edit (or create) a macro just press the appropriate control or function key press and the screen will clear. The macro you are defining will appear in the upper left corner with the definition appearing if a macro already exists. You then type in the macro just as you would like to use it in your program. As an example of just what you can do with a macro the program contains a macro that loads a disk directory program (complete with line numbers), runs the program to catalog the disk of your choice, and then goes back and erases the progam it just wrote and ran. This macro is a good example of just what can be done using EZ-KEYS for your programming efforts. As a point of information it is posible to create those macros using TI-Writer or FunnelWeb although the Macro Editor is easier. After manufacturing your macros on your word processor you will have to run the "POKER" program on the EZ-KEYS disk in order to convert these to proper macro format. Obviously, it is possible to create a series of customized macros for your different programming needs and use these as required. The documentation is quite explicit as to how your customized programs are created and the user should have no problems following them.

EZ-KEYS has several utilities which alone make it worth your serious consideration. The one I like the most is CALL LINK("AUTO",x) where x is a number between 0 and 18. The AUTO utility will, every x minutes (a value of x=0 turns this function off) saves off your program to (alternately) DSK1.BACKUP1 and DSK1.BACKUP2. This could save your life (sanity?, temper?) in case of a sudden lock-up of your console or a loss of power to the unit. Right, you're sitting there telling me "Heck Paul, I save off my program every 5 or 6 lines as a matter of course!" Sure you do, just like I do all of my programming in machine language because assembly is too easy to bother with. The other utilities can do such things as turning EZ-KEYS off and on, a CALL LINK("COLORS" a,b,c,d,e,f) which sets all of your foreground and background colors for programming, Macro Editor, and the special colors used in macro definitions, and CALL LINK("HILITE") which reverses the colors of the numbers and the arithmetic operators. This can be useful in debugging a new or existing program and finding out where you typed in O and instead meant 0. In conclusion EZ-KEYS is a powerful programming tool worth your investment if you do a lot of programming (or want to) or just if you are worried about a power failure losing a lot of your keystrokes into that great disk in the sky.

Many of you out there subscibe to the GENIAL TRAVEleR the diskazine published by Barry Traver. This excellent "publication" comes packed with both sides of a flippie full of neat programs and other information files. This is where the ARCHIVER program first made its appearance and other great programs as well. Many of you have been waiting for the

appearance of Volume 2 Issue 1 of the GENIAL TRAVEleR and may have also noticed that Barry Traver and his son John Calvin were not in appearance at the Chicago Faire. The reason for both of these is that Barry has had a detached retina and had to go in for laser surgery. The following is part of a message that Barry Traver left for me on Compuserve last night;

I'm also sorry that I missed Chicago (I heard it was a great fair - as usual!), but I hope that I'll be back to more normal activity again in time for the next one.

Could you do a favor for me? Could you see to it that an announcement is put in the Chicago TImes to this effect?:
Due to Barry Traver's having had emergency eye surgery for a detached retina at the end of October, publication of Volume 2, Number 1 of the Genial TRAVelER has been delayed, as well as the associated John Calvin Traver project. Reports are that the surgery was essentially successful, although his reading and computing activity by doctor's orders have been limited while healing takes place. When eyesight permits, both GT and JCT will resume normal publication, although a refund may be had instead by any subscriber who would prefer not to wait. Current price for the JCT project, incidentally, is $24.00 for the six flippy disks, rather than $18.00 as reported in a previous issue. Barry sends thanks to those who have remembered him with cards, phone calls, and prayers.

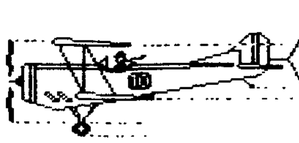
Those of you who have been getting the GENIAL TRAVEleR know what a great buy it is and speaking for me I intend to wait for the next issue to come out. Places where you can get great programs are not easy to come by and should be cherished. Barry's magazine is a great bargain you can't afford to miss.

Now, I mentioned that I had something to say about programming so here it goes; We need some good Basic and Extended Basic programs to share amongst the TI family that exists in these pages. I issue an invitation (challenge?) to send me programs that you have written. If they're short enough I'll take hardcopy but I would prefer either cassette tapes or floppy disks. All good ones will be printed and discussed within these pages, and I will assemble a disk (and cassette) that I will put into the Users Group Library. I can't promise any big prizes for good programs but between the regular library and the >300 disks I have in my own collection I'm sure that the Group can pay you back for your eforts in supplying us with good programs. They can be of any type games, utility, or whatever just as long as they are written ENTIRELY in Basic or Extended Basic. Now get out there, get one of the programs I just reviewed to help you, and start sending me those programs at; P. Farber and Associates, 7619 Virginia Court, Willowbrook IL 60514 USA. Till then, see you next month.

FAIRE TAPES ARE HERE!

The 5th Annual TI Faire Video Tapes are now available for $30 for 2 Tape set.

Send check for $30 USC to Chicago Users Group, PO Box 578341 Chicago 60657



A SPAD FLIGHT ADVENTURE

by Dave Wakely

Before starting this month's Spadventure, I'd like to backtrack a little. The original idea for this column arrived shortly after I purchased Spad XIII last summer. At the same time it also occured to me that I knew very little about the development of this program. For example, nowhere in the documentation or in the program itself is the author's name mentioned. All I had was the information that it was produced by Not-Polyoptics, a long-time fixture in the TI 3rd party software world. My letter to them brought a detailed response from Gene Harter, one of the partners in Not-Polyoptics, with information which you might find interesting.

What follows is presented as an interview. Actually it is the questions contained in my original letter, interspersed with the responses I received:

DW: Who wrote Spad XIII? How long did this programming effort take, and what problems were encountered?

GH: Spad XIII was written by my brother David, with some assistance from me. He was born, by the way, in Chicago, while our family was living in Des Plaines. If you want to write him he lives at 416 High St., Chestertown, MD 21620.

Spad took about 8 months to write. Soon after we released the original version David discovered graphic algorithms that would make Spad about twice as fast (things often happen like this), so we wrote Mark 2, which includes the new algorithms and some extra features, some of which were suggested by users.

DW: The viewing area in Spad is obviously clipped on the edges. Was this done, as it appears, to obtain or preserve "aspect ratio"?

GH: The reason the screen is clipped is to decrease cycling speed; we estimate a 50% faster speed as a result. F-15 Strike Eagle for the PC cuts off half the screen for the same reason.

DW: Both the sky and ground in Spad are blue. Why? Did some constraint of the computer dictate this?

GH: The greatest limitation of the graphics, we found, was that the TI doesn't have a true bit-map mode, that is, each bit does not have its own color, but is either on or off in the context of its byte, which can have only two colors. So whenever the program tries to write three different colors on a byte, say a horizon line, a smoke line, and the blue sky, one of the colors is ignored and the image drawn "smears" over that byte. That is why the ground is blue; if we had colored it in green the smearing would have been unacceptably distracting. Of course we used the bit-map mode that is available in order to get the 3D line perspective views, and I don't think going to mono-color would have helped.

DW: I was quite surprised and pleased to receive the Mark 2 version of Spad XIII. Are further upgrades in the works now or planned? If so, is user feedback as to desired features wanted?

GH: As far as another update, there is no improvement planned as dramatic as the faster algorithm and Red Barons in Mark 2, and memory restrictions are getting pretty tight for any more features, but we do have some ideas.

I would just urge everyone to send in their registration cards, just in case. (Also) for your information, Spad is not a 32K program - it is actually over 40K, using console memory and VDP RAM as well as the Extended Memory.

DW: Is there a version of Spad XIII planned specifically for the Myarc 9640 computer?

GH: Spad now works in the Extended Basic mode of the Myarc 9640, but we don't plan on a version specifically for that computer unless we see a perfected version of the Operating System and evidence that more are being sold than at present.

DW. One of the attractions of the Microsoft Flight simulator is the "undocumented" features that author Bruce Artwick put into the program. Are there any "undocumented" features of Spad XIII such as uncharted graphics, etc.?

GH: There are no undocumented features that I am at liberty to publicize.

DW: How was the decision made as to what villages to place in the program? For example, why was Soissons included, but Belleau Woods and Chateau Thierry, where many Americans fought and died, left out?

GH: The French villages were chosen just as representative villages in the vicinity of Paris, caught up in the currents of the war.

DW: This one is half question and half suggestion. In the Microsoft FS, a number of "scenery disks" are beginning to appear. That is, the programming for flight is independent of the programming for scenery. Is it possible (or how about) a system whereby new "operational areas" are available, possibly as "add on" disks. The precedent for this exits, for example, with the TOD editor, whereby Tunnels of Doom owners can have new adventures with the same program.

GH: I like your idea for user-created scenery; maybe a user-created airplane too!

DW: Where did the name "Not-Polyoptics" come from, and what does it mean?

GH: We bought a 99/4 in 1980, choosing it over the Apple II, mostly because it had better graphic and sound capabilities. Being programmers and game designers it was a short step to forming our own company (called Not-Polyoptics because one of the partners didn't like the name Polyoptics), and thus we became one of the first companies to support the TI. Through the years, we have seen other companies come and go; we have seen advertising possibilities dwindle; and we have seen the TI market survive the most virulent blows and continue to survive. We still sell more than twenty games and simulations for the TI, though in the past year and a half our sales of older games have dwindled. Some of our newer Extended Basic programs such as Laser Tank, Tower, and NORAD, really show off some of the capabilities of the TI, but we have found it very difficult to get out the word to the TI Community. Even Spad has not sold as well as we had expected. We appreciate your efforts to publicize Spad, and look forward to seeing future installments of the adventures.

Spadventure #3: Test Flight

You will want to read this adventure all the way through first, before proceeding, so that you will know in advance (hopefully) what to do.

Several officials from the Societe Pour Aviation et ses Derives (S.P.A.D.) have just delivered to the airfield their newest machine. The Spad 13.1 is carrying what is purported to be a new, more powerful experimental engine, and they have asked your wing commander to pick out his most accomplished pilot. He wasn't around, so instead you were chosen to field-test it. Congratulations.

As you climb into the cockpit, check out all the instruments and controls, using our usual pre-flight procedure. The plane is brand new, has been freshly painted, and looks great. The engine has been idling and is warm. In fact, the plane even smells good, but no matter, so open it up completely ("9" key) and let's see what this thing can do. When speed reaches 100 MPH, pull back once on the stick and feel the rush of cold air from the backwash of the prop. Better throw the silk scarf around your face one more time.

Staying at full throttle, take the new machine right up to exactly 1,000 feet in an all-out climb. Straight ahead and up. This is great. You can feel the raw power of the engine coursing through the plane, and you can already picture yourself flying circles around the Red Baron. Now the bad news.

Reach up and hit the "0" key - NOW. Your engine has just quit. No, not quit. Died. The specially glazed crepes used as experimental cylinder linings just disintegrated, and several pistons have seized, turning the plane into an expensive rock. If I were you I wouldn't think about this situation too long, however, as your stall indicator just buzzed, and if I were still you I'd start doing something to keep from becoming a grease spot on the French landscape.

You have a fairly limited number of options here. First and foremost is your desire to live long enough to see Spadventure #4. On the other hand, anyone crazy enough to take on this test is also crazy enough to see if he can now make it back to the airfield as well. That is, from this position, at this altitude, is it possible with no power to actually land back at the airfield? Only a wild and crazy person like you would even attempt it. Oh, there's probably some principle active here about the conservation of energy and whatnot, but perhaps you are not bound by those constraints. You do want to keep in mind that it's not for nothing that they call this a "dead stick" landing.

So, for this game-within-a-game here are the rules: You must take off at full power, pulling back once on the stick at 100 MPH and climbing until the altitude indicator shows exactly 1,000 feet. During the takeoff and ascent you may use no aileron or rudder controls. You must then cut power to "0" and cannot power up again. When the power is off you may use any and all other techniques which help return you to the home airfield (except that no, you Mark 2 users may NOT use the "M" key!).

If any part of your plane comes to a safe stop within the lines which mark the runway, you will be hailed as a Master Aviator and receive the French Legion of Valor.

If you land safely close enough to the runway such that the simulator repositions you on it facing North for the next takeoff, you get to keep the pot of money from the bets that your ground crew was making that you wouldn't be back.

If your plane lands safely within sight of the airfield (you will be able to make out the roof of the hangar even from some distance away), consider yourself lucky. As you walk back, carefully compose in your mind what you want to say to the SPAD officials about their new construction techniques.

If you land safely with absolutely no idea where you are, send up a signal flare and consider transferring to the Artillery division.

No matter where you ended up, if you soiled your flight pants during this event, begin walking to the English Channel. Then keep going.

For any other landing, we will come visit you in the field hospital. You can try again when you get out. They're working on this idea of using stale loaves of French bread for propellers...

Good luck.

T H E B A S I C A S S E M B L E R #14 By Steve Peacock

SPEECH

Creating speech with assembly is fairly complicated. However like all difficult things it gives you great satisfaction when done. I must take time to give a hearty THANKS to Mr. Nick Iacovelli Jr. for his help with the writing of this assembly program. I was unable to understand the Editor/Assemble manual on how to write a speech program. He showed me how. Thanks Nick!

Start your code with a reference to speech write and read (SPCHWT SPCHRD). As you can see from this months assembly code, some data and other information must be set at the start. Do not forget to add LIMI 0 and LIMI 2, so the 'FCTN' quit key will work.

Any word that is in the resident vocabulary may be spoken. This list is on pages 422 to 427 of the Editor/Assembler manual. To speak a word you must find it's address from this list. The word 'COMMAND' has an address of >1F1A. This is four nibbles, 1, F, 1, and A. Each of these nibbles must be written to register one. They are written backwards so for the word 'COMMAND' they are written A, 1, F, and 1. You must also add 4x to each. This make the four nibbles: 4A, 41, 4F and 41.

As the last nibble you must add 40, and write it to speech write. The command H50 is then given. This is what causes the computer to speak. As the computer is speaking you must check to see if it is done. If it is not then jump to a time delay. COC @H8,R0 checks to see if done. If not, jump to a delay and then return to check again.

After the word is spoken, the program jumps back to the start and is in an infinite loop, and the word is spoken again.

As you can see, quite a bit of coding is need in assembly to say the word 'COMMAND'. Only one line is needed in Extended BASIC. Where is the advantage? Time. If you listen to the assembly version and the BASIC version, you will be able to tell that the assembly program is running faster.

```
################################################################################

100 REM PROGRAM BA14B-->Basic Assembler #14 BASIC Version
110 REM SPEECH
120 REM (C)1986 S. PEACOCK
130 REM YOU MAY WANT A 'CALL CLEAR' HERE
140 CALL SAY("COMMAND")
150 GOTO 140
160 END

################################################################################
```

```
********************************************************************************
*
* PROGRAM BA14-->Basic Assembler  #14 Assembly Version
* SPEECH
* (C)1986 S. PEACOCK
*
********************************************************************************
* THANKS TO MR. NICK IACOVELLI JR. FOR HIS HELP WITH THIS PROGRAM.
       DEF  START
       REF  SPCHWT,SPCHRD   *REFERENCE TO SPEECH WRITE AND READ
HHROM  DATA >0000
H50    BYTE >50
HAA    BYTE >AA
H8     BYTE >80
       EVEN
START  LIMI 0
       LIMI 2
* THE WORD TO SPEAK IS 'COMMAND'
* ADDRESS IS >1F1A
* EACH NIBBLE IS PUT IN FROM RIGHT TO LEFT
* ADD 4x TO EACH NIBBLE => 4A, 41, 4F, AND 41
       LI   R0,>4A00        *FIRST NIBBLE 'A'
       MOVB R0,@SPCHWT      *WRITE IT
       BL   @DLY12          *WRITE DELAY OF 12 MSEC
       LI   R0,>4100        *SECOND NIBBLE '1'
       MOVB R0,@SPCHWT
       BL   @DLY12
       LI   R0,>4F00        *THIRD NIBBLE 'F'
       MOVB R0,@SPCHWT
       BL   @DLY12
       LI   R0,>4100        *FOURTH NIBBLE '1'
       MOVB R0,@SPCHWT
       BL   @DLY12
       LI   R0,>4000        *'40' MUST BE ADDED AS A LAST NIBBLE
       MOVB R0,@SPCHWT
       BL   @DLY12
       MOVB @H50,@SPCHWT    *HEX 50 IS COMMAND TO SPEAK
WAIT   BL   @READIT
```

```
       MOV  @SPDATA,R0
       COC  @H8,R0           *CHECK TO SEE IF SPEECH IS DONE TALKING
       JEQ  WAIT             *IF LEFT OUT MACHINE MAY LOCK UP!
       JMP  START
       AORG >8328
SPDATA DATA 0
READIT MOVB @SPCHRD,@SPDATA
       NOP                   *DELAY
       NOP
       NOP
       RT
DLY12  NOP                   *DELAY 12 MSEC
       NOP
       RT
DLY42  LI   R1,10            *DELAY 42 MSEC
DLY42A DEC  R1
       JNE  DLY42A
       RT
       END
                             - - - - - - - - - - - - -
```

T H E B A S I C A S S E M B L E R #15 By Steve Peacock

CHARACTER DEFINITION IN 40 COLUMN TEXT MODE

As I promised in the BASIC ASSEMBLER #10, this program explains how to redefine a character in the 40 column text mode. There is not much to it so here goes.

The normal mode of the TI computer is called GRAPHICS mode. The screen is made up of 24 rows of 32 columns. Each one of these position is made up of a grid that is 8 x 8. In the TEXT mode the screen is made up of 24 rows of 40 columns. Each of these positions is made up of a grid that is 8 x 6. When redefining a character you must design your new character using the 8 x 6 grid. It is easy to just think of the last two pixels, in an 8 x 8 grid, as being off. This month I am redesigning the asterisk, character 42d or A2h. This is how I determined my new definition:

```
######oo  FC
#0000#oo  84     #=ON
#0000#oo  84     0=OFF
#0000#oo  84     o=NOT USED
#0000#oo  84
#0000#oo  84
#0000#oo  84
######oo  FC

      /
  THE LAST TWO
 ROWS OF PIXELS
  ARE NOT USED
```

To redefine a character in 40 column text mode you must find its address in the pattern descriptor table. This location is the same as in the GRAPHICS mode. Please see BA3 for a table of all character locations.

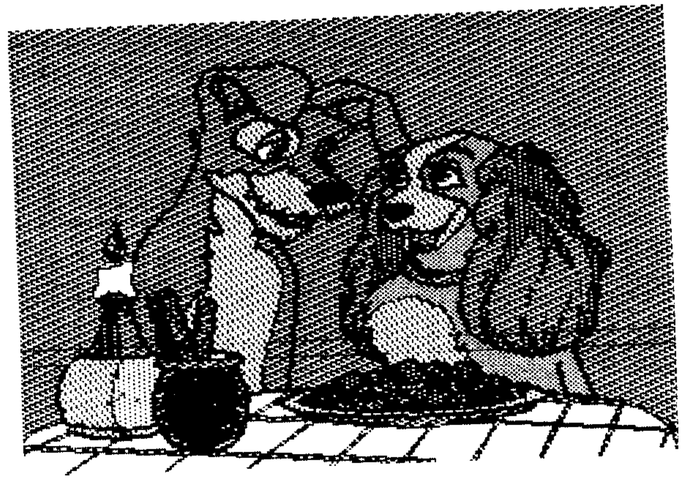
Please see program BA10 if you need to review setting 40 column text mode.

##


```
100 REM PROGRAM BA15B-->Basic Assembler #15 Basic Version
110 REM CHARACTER DEFINITION IN 40 COLUMN TEXT MODE
120 REM (C)1986 S. PEACOCK
130 PRINT "NO BASIC COUNTERPART FOR    CHARACTER DEFINITION IN 40  COLUMN TEXT M
ODE."
140 END
```

##

```
**************************************************************************************
*
*PROGRAM BA15-->Basic Assembler # 15 Assembly Version
*CHARACTER DEFINITION IN 40 COLUMN TEXT MODE
*(C)1986 S. PEACOCK
*
**************************************************************************************
       REF  VWTR,VMBW,VSBW  *REFERENCE TO WRITE TO REGISTER
       DEF  START           *MULTIPLE BYTE WRITE AND SINGLE BYTE WRITE
START  LI   R0,>071F      *SET COLORS FOR TEXT MODE 1 BLACK ON 2 WHITE
       BLWP @VWTR
       LI   R0,>01F0      *SET COMPUTER TO 40 COLUMN TEXT MODE
       BLWP @VWTR
       SWPB R0            *PUT VALUE IN VDP REG. 1 INTO THE LEFT BYTE OF REG. 0
       MOVB R0,@>83D4     *PUT IT IN >83D4
       LI   R0,>0950      *LOAD POSITION OF ASTERISK, IN PATTERN DESCRIPTOR TABLE
       LI   R1,DEF1       *LOAD THE NEW DEFINITION
       LI   R2,8          *EIGHT BYTES LONG
       BLWP @VMBW
       LI   R0,367        *WILL PRINT CHARACTER AT SCREEN LOCATION 367d
       LI   R1,>2A00      *CHARACTER 42d is 2Ah
       BLWP @VSBW
DEF1   DATA >FC84,>8484,>8484,>84FC       *DATA FOR REDEFINITION
LOOP   LIMI 0             *AN ENDLESS LOOP
       LIMI 2             *SO FCTN QUIT
       JMP  LOOP          *WILL WORK
       END
```



HIGH RES GRAPHICS AND THE 99/4A

By Anne Dhein

PART 2

The Comparison Chart

Section Four: Hard Copy, File Management and Extra Support

Except for Super Sketch and Draw A Bit, which both have supporting disks that contain screen dumps, the drawing packages listed here all include built-in printer routines. The printer and the software package you use must be compatible. All of the programs listed are compatible with the TI Impact Printer which was made by Epson, so any printer that uses the same formats and codes as an Epson is also compatible. Paint 'N Print comes in a choice of three cartridges depending on which printer you have. Cartridge A works with the Axiom GP-100 and GP-700 printers. The GP-700 will give color printouts. Cartridge B is set up to work with the Axiom GP-550 and Okidata printers, and C is for the Epson compatibles, which include Star and IBM. The Extended Graphics Package which supports Paint 'N Print contains the routines from all three cartridges. Other printers that can be used with a particular drawing program are listed on the chart.

Screen dumps vary widely in several important respects, including size, density, and placement on the page. All details given here were gotten from screen dumps using the TI Impact printer. They should more or less apply to all screen dumps but there could be differences. A small size screen dump occurs when the screen image is copied exactly as shown, pixel for pixel. A larger dump has more printer dots per pixel - usually either 4 or 16 dots for each pixel, which can give a blockier effect from up close but looks great when the viewing distance is further away.

The size of the printout is also affected by density. On the TI Impact printer there are normally 60 dots printed horizontally per inch. This would make 480 dots per each 8 inch row. Double density prints 120 dots horizontally per inch, and some printers have an even higher dot resolution than that. Since the graphic image has the same number of pixels no matter what density is used, it will be only half as wide when printed double density as when printed in normal density mode. Most of the packages listed here handle this factor for you by adjusting the line spacing when double density is used. Because of the difference in printers, and because screen graphics don't match up exactly pixel for dot with printer graphics you may still find some distortion in your printouts. On the whole, though, most paint packages produce a reasonable hard copy of your screen graphics.

Joy Paint gives you a choice of two dump sizes and either size can be single or double density. The small dump is centered on the page, and because Joy Paint uses 92% more area for graphics than other packages, it pretty well extends from one side of the page to the other (5 1/2 inches wide times 3 1/2 inches high). Three of these dumps will nicely center on a page, which, using three screens consectively, will produce a very good flyer. The large dump

produces a horizontal picture 8" X 9" in size.

Bitmac also gives you a choice of large or small dump. The small dump places exactly one dot on the paper fo each dot in the screen to give a single density printout 4 1/4 inches wide X 2 5/8 inches high. You have a choice of centering the graphics, or placing them over to the right or left margin. The large dump is centered and is double density. On the TI Impact printer it is distorted quite badly, however, as it is the same heighth as the smaller picture, but 6 3/8 inches wide.

TI Artist gives you the most control over the final output for your hard copy. You have a choice of up to three magnifications and four densities depending on what your printer is capable of doing.You can also control line spacing when the printing is being set up. Using the TI Impact printer you can have a double density printout as small as 1 3/8 X 2 1/8 using a magnification of 1 and a line spacing of 4; or a printout which will fill an 11" X 15" large size paper with a magnification of 3, a line spacing of 8, and single density. And all this from the same screen image! Printing can also be done from the zoom mode.

All TI Artist printouts are centered no matter what the size. A single density printing that has been magnified twice exactly fills one-half of a standard page; two consecutive printings make a very nice flyer.

Graphx gives you a choice of two sizes, single or double density. The smaller (4 1/4 X 2 5/8) is printed at the left margin. The larger is half of a standard page - again, two screens make a nice flyer. Draw 'N Plot has one size, 4 1/4 X 2 5/8, single density. Paint 'N Print also has one large size single density printout. Paint 'N Print gives a choice of which part of the drawing will be printed - from a very small section up to the whole screen. The drawing will be printed horizontally and in the upper left corner of the paper.

Sketch Mate, the Super Sketch companion disk, and the Master Painter program, both by Amerisoft International, have virtually identical printouts. Each is 7 3/4 inches wide and 4 5/8 inches high, single density. Each uses a technique whereby colors are assigned a texture (light, medium or dark) to simulate color. This gives pictures a very nice printed appearance. Each color is assigned a default setting which can be changed by the user if desired. The Paint 'N Print program also uses the technique of assigning a different print character for each color. The Draw A Bit companion disk also allows two printout sizes; single or double size, and each can be normal or double density.

The Norton Graphics Package doesn't actually contain a screen dump. Rather, it allows you to print out data that is needed to rebuild your graphics in your own program, either as Sprites or as Call Characters. This graphic data may also be saved in merge format on a disk.

File Management
Disk Catalog - It's handy to have a catalog available if you need to

find out just what you did name a certain file, or even if it's on that disk. Only two programs perform this service - TI Artist and Joy Paint. Joy Paint also provides for deleting files.

Conversion Features and Compatibility - If you are intending to use pre-designed graphics either instead of or in addition to creating your own, file compatibility among the various programs becomes important because you will need a ready supply of artwork and clipart. The core program here is TI Artist. Not only is more ready-made artwork available for TI Artist than for the other paint programs, but TI Artist allows picture files from Draw 'N Plot, Graphx and Draw-A-Bit to be loaded in and permanently converted to the TI Artist format. Or, TI Artist files can be converted with TI Artist and loaded from any one of those programs. Instances, which are a very popular form for clipart, can be converted by first saving as a picture, then converting to an instance. CSGD graphics, which are another popular form of clipart, can be converted using any of several available programs including the Artist Extras companion disk. CSGD fonts can also be converted to TI Artist fonts using the same disk.

Joy Paint's Pal allows the conversion of Graphx, TI Artist, and Draw 'N Plot picture files to the Joy Paint format and visa versa. Joy Paint will also load the first of the two output files for Sketch Mate. It will not, however, load Bitmac files, even though Bitmac has the same Internal/fixed/128 format that Joy Paint does. This leaves Bitmac as the only major paint program to lack compatibility with the others.

Graphx does not have a file conversion feature, but it will load TI Artist files that end with _P. If you transfer the picture file this way you do lose the color. If the color is important the file must be converted to Graphx format within the TI Artist program first, then loaded into Graphx. Graphx will also load Joy Paint files that have been through the conversion program on Joy Paint's Pal.

If you are primarily interested in screen graphics then file portability is important. This is the ability to move picture files into another environment without a great deal of programming; for example being able to move a picture you have drawn in TI Artist into your Basic program. This ability is built in to TI Artist's instances, slides and font files, which has caused a great many support programs to be written, both commericial and as sharewares.

Draw 'N Plot and the Norton Graphics Package can easily be used by the average Extended Basic programmer. In the same way, Draw A Bit and Graphx adapt easily for assembly language programmers. Portability for the rest of the programs is limited.

Additional Support
In many cases the manufacturers themselves are doing a good job of supporting their paint programs. Great Lakes Software puts out clipart disks for Joy Paint, as well as Joy Paint's Pal, which has routines to allow file conversion, creation of new patterns, and a reduction feature. Great Lakes also supports a user drawn base of Joypaint clipart. Their Extended Business Graphs II, while a stand alone package, has file compatibility with Joy Paint.

Besides Artist Extras, Inscebot has released Display Master for the TI Artist which lets you add captions to your drawings and show them in any sequence. Quality 99 Software has some disks of very good artwork out for Draw 'N Plot. A volume of artwork was also released for Bitmac.

Other software producers have also done their share. Asgard Software has released several Graphx Companion sets that contain clipart, full pictures, fonts and animated sequences for the Graphx environment. They are a veritable gold mine of art and ideas for your own creations. Asgard has also released a disk for TI Artist that contains some of the same artwork imported to the Artist environment, but you can still use the Graphx Companions with TI Artist or JoyPaint if you don't mind making the conversions. Asgard has also released Graphx Pictures which contains more of their outstanding artwork - 24 pictures - and a Slide Show program with which to show them.

Trio+ Software has released some excellent artwork for use with TI Artist. Each 2 disk package includes pictures, clipart, fonts and slides.

Texaments handles the Artist Companions authored by Dave Rose as well as the whole CSGD series. One of the best and most prolific sources of instances and fonts for TI Artist actually started out as clipart for another program - Character Sets and Graphic Design by David Rose. But that's a whole new story so it'll be saved for Part three.

Otherwise, the chart has been covered and you should now have a much better understanding not only of what can be expected of paint programs in general but the strengths and limitations of any particular package.

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Your 9640 Information Person: Geneva Gabor

Hello, Darlings. I am Geneva Gabor. Beings my name is so close to what Myarc has decided to call their new computer, I felt it only fitting that I should write an article about this machine.

I have been on various Electronic Bulletin Board Systems and have read numerous newsletters. From time to time I find articles bad mouthing Myarc's Geneva 9640. I am NOT here to promote or deter the purchase of this machine. Although most written articles on this topic are of an editorial nature, I hope to be informative. I know this article will have a limited audience. But, there is good information about the 9640 I feel MUST be revealed. I respectfully request all non-9640 owners to bear with me. As all 9640 owners know, what you read and what you get are 2 entirely different things. We are finally up to DOS 1.0 and still can't do all the things the DOS manual says we can. Even at that, we still have a working machine. There is no way to find the built-in Ramdisk. And, DOS can't find the Horizon RAM Disk. As you read further, you will see that ways have been devised to do just these things. First off, you will need a good sector editor program. One that can locate string names. Let's set our DOS up to find the HRD. First off, the HRD can only be found by the 9640 if it is residing at CRU >1400 or >1600. Please set your DIP switches. For CRU >1400, switch 5 must be up. Put switch 7 up if you want CRU >1600. Now that you have the switches set, you will need to set up a physical drive number. If you chose CRU >1400, the drive number MUST be 6. CRU >1600 will be #7 drive. The built in Ram disk is drive 5. If you've ever done an ASSIGN command from DOS, you would have or will notice that drives A through G have been assigned as DSK1, DSK2, DSK3, DSK4, WDS1, WDS2 and WDS3 respectively. I only have a 2 drive system. But, I chose to make the letter D (DSK4) my HRD. Here is what I did. Using a sector editor, I looked for every occurance of the string DSK4. I found it twice on 2 different sectors. Each time I found it, I changed it to the drive number of my HRD. My HRD is at CRU >1400. So, I changed DSK4 to DSK6. Don't forget, everytime you make a change on a sector, you must write that sector back to disk. You would be wise to make these changes to a backup copy of DOS. After you have changed both sectors, exit the program. Boot up DOS. Do an ASSIGN command. You should now see drives A through G with D being equal to DSK6. If you type D:, you should go to D prompt (D>). Type DIR. You should get a directory of you HRD. You can also get a directory of drive D from the A> . Just type DIR D: . You can catalog any drive from any prompt just by typing DIR followed by the drive letter and a colon (:). One of the first things I did while I was waiting for my 9640 was to buy an MS-DOS manual.

I heard M-DOS would be something like MS-DOS. I'll tell you, the book really helped. I have found some things I can do that M-DOS manual doesn't tell or tells wrong. I have also found that M-DOS accepts some MS-DOS commands differently. So, keep trying. Sometimes you need to add or subtract a colon or something. Here's a neat little command I found. The manual tells you to create CONFIGSYS and AUTOEXEC files from a word processor. I found you can do it from DOS. Here's how: First, go to the drive prompt that corresponds to the drive you want CONFIGSYS or AUTOEXEC on. If you want it written to drive 1, go to A> . B> for drive 2 or maybe D> for your HRD. Yes, you can boot DOS and an AUTOEXEC file from HRD. I'll explain later. Now that you have the proper drive prompt, you must tell the computer what you want to do. We want to copy text from the console to a file called AUTOEXEC. Here is how that is done. COPY CON AUTOEXEC (hit enter). Now you are in the mode for creating an AUTOEXEC file. Every statement must be on a separate line. Once you've finished typing all your statements, you end the command with a Control Z on a separate line. Control Z will tell the computer to write the file to disk. After a write, you must tell the 9640 to leave this mode. Do this with a Control C. Here is an example of how I create an AUTOEXEC file that sets aside an 88K TIMODE, a 255K internal Ram disk and a 64K print spooler. I will write this file to drive 1 my A drive. A> COPY CON AUTOEXEC (HIT ENTER) TIMODE (HIT ENTER) RAMDISK 255 (ENTER) SPOOL 64 (ENTER) Z (THIS IS CONTROL Z. IT WRITES FILE TO DISK) C (CONTROL C MAKES ME EXIT MODE)

If you catalog your disk, you will find a 2 sector DV 80 file named AUTOEXEC on it. How can I tell DOS where to find the AUTOEXEC file? Very easily. Get your sector editor out again. Search for string DSK1.AUTOEXEC. Change the drive number to the one with your AUTOEXEC file on it. Write the sector back to disk. Next time DOS boots, it will pop over to the proper drive and get your AUTOEXEC file. If your system is set up like mine and you have only 2 floppies and HRD at CRU >1400 set for drive D, you will find that doing a directory of drive C will display your internal 255K Ram disk as drive 5. If you've made all the changes I've mentioned above, you should see some really nice ways of using the 9640. Our only other problem is booting DOS. It's 358 sectors long. The swan is pretty, but, consider the time required to check memory then load all 90K of DOS. We end up watching the swan for quite a while. I guess it's better then MS-DOS machines. They don't even give you a swan to look at. Well how about this? Would you like to see DOS up and running within 3 seconds of turning on the machine? No, it's not a crazy question. Matter of fact, there's not a crazy answer. If you own a Horizon RAM Disk, it CAN be done. Matter of fact, you have a few choices of doing it. Peter Hoddie of Genial Computerware, has come out with an EPROM that replaces the 8K by 8K RAM chip (U11) on the HRD board. If all your chips are socketed, You'll only need to solder 1 wire. You remove U11 and plug in the new EPROM. Then solder a jumper wire (provided) to pin 14 of U10. Once you have the EPROM installed, you will find you can do more then just boot DOS. Here is a list of CALL commands you can perform. CALL HDDIR - Prints out a directory of the HRD. CALL HDDN(n) - Sets drive number of HRD. Can use 1-6 as drive #. CALL HDVOL - Lets you give your HRD a volume name or label. CALL HDSZ(k) - Lets you set the size in Kilobytes of your HRD. CALL DM - Lets you load DM100 from filenames MG and MH. CALL BOOT - Loads in a menu program. CALL MD - Loads in a MoDem program from a filenames MD and ME. CALL EA5(filename) - Loads a particular E/A 5 program. CALL EA5 - Loads in a UTIL1 file. CALL ILD - Same as a CALL INIT. CALL LD(DSKn.xx) - Same as a CALL LOAD(DSKn.xx). CALL LLD(xxx) - Same as a CALL LINK(xxx).

There also are some power up key presses. Press these keys during BOOT. 1 to 6 - Sets default drive number. 0 - Turns DSKx emulation off. D - Loads MG disk manager. U - Loads UTIL1. M - Loads MD MoDem program. B - Loads Boot. ENTER - Bypasses auto power up.

As you can see, Peter has given us quite a few routines for our 9640's. I also understand he has or is coming out with the DOS 1.0 or 1.1 version of the EPROM. Another way of booting DOS from your HRD is to use a fairware program from James Schroeder. Jim's program comes with a DOC file and 2 other files called LHDROS and HDROS. I must tell you that ALL functions of setting up your HRD with this program are done using the 9640. The DOCS don't say this. I was the dummy trying to do half of the set up with my 4A and the other half with my 9640. Once you have a copy the fairware program, do this: 1) Go into TI MODE and load E/A. 2) From option 3 of E/A load and run LHDROS. 3) Choose item 1 or 2 from the menu. Remember, your HRD must be at CRU >1400 or >1600. 4) Type in the drive number HDROS is on. Ex. DSK1.HDROS. The drive will come on and load HDROS. 5) Hit item 3 to exit. 6) Load in DM100. Do the following: A) Chose item 2 for disk commands. B) From the Disk Command menu, chose #6 BOX FORMAT. C) Format your HRD as 6 or 7 using the appropriate number of sides and density to match your HRD. D) Do NOT verify sectors. E) After format has been performed, FCTN 5 back to Main Menu. F) Chose item 1 for File commands. Transfer HDROS and SYSTEM/SYS onto your HRD. 7) Exit DM1000. 8) Read and execute the instructions I have outlined above for setting up DOS to find your HRD and boot AUTOEXEC from it.

If you have made most of the changes I've outlined, this is what will happen at power up. 1) The swan will appear on your screen. 2) In about 1 - 1.5 seconds, the light on your HRD will flash. 3) About 1 - 1.5 seconds after the light flashes, DOS will be on your screen. Want to read a text file but are too lazy to load in MYWORD? Do this. Use the TYPE command. Follow it by the drive letter and filename. Example.. Load in a text file called README from drive 2. TYPE B: README In closing this article, I'd like to mention a few things and hope I've given you some insight to our new toy. To date Myarc is at DOS 1.0, MYWORD 1.0, ADVANCED BASIC is really XBII 2.11, and a new C SAVE. I understand MYWORD should be coming out that boots from DOS. There is also information that Peter Hoddie has kept the rights to MYWORD. All future updates to it will probably come through Genial Computerware. There is a buzz in the air that DOS 1.1 is not far away. If it hasn't already reached you. Today is 12/7. I expect 1.1 to be out by Xmas. As I gather more information I feel should be passed along, I will certainly post another article here. Until that time, with Carole Goldstein's kind permission, maybe we can have an ASK GENEVA section. I would be more then willing to answer or find answers to questions about the 9640. There is a vast array of knowledge out there. I find all TI people are always ready and willing to share their knowledge with others. If you have any questions or would like to share some bits of info with us, please send a letter to: Geneva Gabor C/O The Chicago TI User Group P.O.Box 578341 Chicago, Ill. 60657. Until then, darlings, I wish you lots of love and lovers.

XOXOXO,

Geneva

GENEVE SUPPORT COLUMN

Hi there, Sports Fans!

Well, just as I said, here I am, in my new incarnation. I hope that this will be an on-going monthly column, which will be devoted exclusively to things which are directly or indirectly related to the new Myarc (Geneve) 9640 Computer. For me, this is a very important and significant thing that I do, as I feel that the future of our TI Community lies with the future of the 9640 Computer. Unfortunately, I must admit that I have yet to find one positive thing said about the 9640 Computer in this newsletter, that has not been said in the most grudging way. Still, most people are able to admit that there are two sides to any question. Heretofore, only one point of view has proliferated in the pages of this newsletter.

Though I shall be working at a grave disadvantage, I shall endeavor to present that other side of the question. You may ask why I say I will be working at a disadvantage. I say this for two reasons: 1.) All that I write will be available for rebuttal, by the editor, in the very same issue in which my ideas shall appear, and 2.) I feel that many people are convinced that positive viewpoints are uncritical, lack probity, perspective, and discrimination. In other words, it appears that it is tacitly considered as chic to take a negative point of view. Cynicism and pessimism are considered to be acceptable and "in." Optomism and faith are looked upon with disdain and derision. Everyone knows that bad news travels very far and very quickly. Most people don't want to hear praises; it's the negative stuff that sells copy! (I truly believe that most newspapers and televison stations would go out of business if they dealt only with positive and uplifting subjects; the public just isn't interested in that sort of thing. It's the rapes, the murders, the extortions, the bribery, and the dishonesty that sells both newspapers and air time.) Well, so be it; still, I am not afraid to express my pleasure with this new machine.

It is clear to me that the machine, which the editor of this newsletter, Carole Goldstein, has been using, for her reviews, has been a defective machine, and I don't feel that this gives a fair or representative view of the machine. Rather, it will clearly give a highly one-sided view. Consider this scenario, which I feel is analagous to the situation under which the Geneve has been reviewed here: You are a writer for an important and highly influential automobile magazine. Your assignment is to review a new high performance car. The car, which has been purchased, for the review, has a defective carburetor (or maybe fuel injection system). As a result, it is difficult, and sometimes impossible, to start or restart. It is sluggish, when accelerating; it is highly profligate, relative to its use of gasoline, it idles roughly, and tends to die when you come to a stop. If you choose to review the machine in this condition, obviously, the review will be so negative that many intelligent persons will be dissuaded from purchasing one. In order to write a fair or objective review, you must do all that is necessary to bring the machine up to its specified operating conditions. To do anything else would cause your review to be highly prejudicial. Unfortunately, I don't feel that this has been the case, relative to the reviews, regarding the 9640 Computer, in this newsletter.

I LOVE MY TI, BUT I ALSO LOVE GENEVE

Let me begin by saying something which has not been seen in this newsletter: I AM VERY HAPPY AND SATISFIED WITH MY (GENEVE) 9640 Computer. I AM GLAD THAT I PURCHASED IT, AND IF I COULD GO BACK IN TIME, I WOULD DO IT AGAIN! Am I an uncritical, non-intelligent, non-discriminating imbecile? Well, all things are possible, and you will have the opportunity to come to your own conclusions, relative to this conjecture.

Why am I so happy, with my 9640? I feel that this is a fair question, and I shall now attempt to answer it with the following reasons: 1.) I purchased my machine with full knowledge of the problems which Carole was having with her machine. I purchased it

expecting to have all sorts of problems and difficulties. 2.) I looked at the new machine as a potential challenge, a sort of a "adventure" which I had to solve. I expected for my joy to be found in the process of discovery and in the unlocking of the secrets of the machine. 3.) I received excellent support from my dealer (Mr. Bob Demeter, of Lake Computer Depot), from whom I purchased my machine. (I hasten to add that this was a very crucial factor to my happiness, and I would strongly advise against purchasing this machine sight-unseen or through a catalogue. Unless you are very bright, which I don't claim to be, you will require some help in getting started.) Therefore, when I finally did get my machine, I left his home with a rudimentary working knowledge of how to use the machine. 4.) As a result of my work on this year's Faire, I had the pleasure to become acquainted with Barb Wiederhold, of the Queen Anne Comuter Shoppe, in Seattle, Washington. (A month ago, at this time, Barb had sold about 77 Geneve Computers. Though she won't tell me, I estimate that she will have sold about 100, by the time of the printing of this article.) Barb was able to make me privy to quite a few undocumented features, relative to the 9640. 5.) My uses for my machine are somewhat limited; 85% of my computer work is in the area of word processing. Relative to word processing, the Myword program, which I am using to write this article, is a very decent program. When you consider the fact that it is free, with the Geneve Computer, it is highly cost effective. Incidentally, how many other computers actually give you, for free, a word processor, or a DOS, or a spread sheet? Darn few, Neighbors, and this has to be considered with one's considerations, relative to purchasing a Geneve 9640 computer. 6.) Though I did encounter most of the difficulties, which Carole experienced, with the help of my dealer, I was able to solve my problems in short order or find a way of getting around the problems. As a result, I am very happy with my Geneve.

Relative to the problems which Carole has been having, I can only say that some of her problems are hardware and some are software. I am also prepared to demonstrate, publicly, that my machine, using my software, will not have the problems which Carole has repeatedly documented.

Another "fair question," which one would possibly ask me is, "Why would I purchase a machine with which I expected to have difficulties?" The answer to this question is clear and simple: I am committed to the TI Community and the TI family of computers; it's just that simple. I don't own a clone, and I have no intentions of ever purchasing one. In fact, I really don't even want one. I am very satisfied with what I have been able to find within the TI Community.

Some other important questions are, "Should everyone in the TI Community run out and purchase a Geneve? Does everyone need one? In fact, exqctly, who needs a Geneve?" In attempting to answer these questions, let me begin by saying that the choice of what machine anyone invests in is a highly personal choice. As my associate, Mr. Dave Wakely, has stated, you should get the machine "that suits you." And, in order to find out exactly what "suits you," I suggest that you first choose the software that you want/need to run; you then find the machine that is capable of running it. (Not even all "clones" are equal!) Next, I would not urge everyone to run out and purchase a Geneve; nothing is for everybody. I also happen to feel, very strongly, that the TI 99/4A is as much of a machine as most people need. It is a heck of a computer, with a great potential, that is able to deal with most people's computing needs. I therefore suggest that if you have a 4A, keep it. It will do virtually all that you need to have done. The only people who I would counsel towards getting a 9640 are: a.) those who have no computer and are therefore starting from "scratch," and b.) those people in the TI Community who want something more; I mean those who have outgrown the 99/4A. I am talking about those who need a faster and a more powerful machine with an even greater potential. I feel that these people can most benefit from a Geneve.

PROBLEMS, PROBLEM, PROBLEMS!!!

In order to start with the negative stuff, let me discuss some of the problems which I did

encounter with my machine: I encountered almost all of the problems which Carole has routinely and repeatedly documented: run-away keys and redefined keys. Here, I must emphasize that I encountered only most of the problems which Carole documented; some of her problems were never experienced by me. Relative to the problems which I was having, I found out in conversations with Messers J. Peter Hoddie and Jack Riley, of Myarc, that my problems were the result of a faulty keyboard. When I was told this, I didn't want to hear or accept it; I was totally incredulous as I felt that I was being put off and euchered. But once I had my initial keyboard replaced, with the aid of my dealer, all of my problems went away. (Here, I wish to emphasize that the Geneve keyboards are generic XT/AT keyboards that are not mauufactured by Myarc.)

I must again admit that I never experienced some of the problems which Carole documented, such as chronic locking up. I also never had any problems with my telecommunications. The obvious question is, "Why didn't I have the same severe troubles that Carole did?" I feel that the answer to that question is the fact that I had easier access to the most current software that was being made available for the machine. It was made available to me through my dealer and through Barb Wiederhold's excellent b.b.s. Therefore, because of these two sources, I had early access to a terminal emulator, a disk manager program, and other programs that worked. I would also like to mention and thank Mr. Don Walden, of the Milwaukee TI Users' Group and the Wisconsin TI Council. Don was very instrumental in getting to me programs which his associate, Mr. Jim Schroeder, either wrote or modified for the 9640 Computer. Therefore, both Don and Jim were great aids to me.

As I said earlier, it is abundantly clear to me that some of the later problems, which Carole experienced, using our group's Geneve, were hardware related. They were obviously the result of a bad chip, which was progressively deteriorating and/or a faulty voltage regulator. The latter has been a problem with some of the 9640's. I don't feel that this makes the Geneve into a bad or poor machine. As long as Myarc services these machines properly, and in a reasonable length of time, I can see little reason for complaint. Here, I would like to talk a little about Myarc:

AN UNPOPULAR POINT OF VIEW

First, I would like to say that I am not a dealer, I don't work for Myarc, I have never even met Lou Phillips, and I have never received any monies or gratuities from them; I therefore have nothing to gain or lose from either positive or negative statements regarding this company. Also, other than my Geneve, the only other piece of Myarc hardware that I own is the 512K RAM/memory card, and I am very satisfied with it. (You may remember that I did a demo/tutorial for a past users' group meeting, and I uploaded the text of my demo to the users' group's b.b.s.) As a result of this, I remain highly appreciative of what this company has done for the TI Community. I am also well aware of the problems which some close friends of mine have had with their double sided double/quad density disk controllers, when they first came out; I would be dishonest and lacking any credibility if I claimed ignorance of them. In spite of the initial problems, with the Myarc disk controller card, it must also be admitted that that particular piece of hardware, and its accompanying software, actually works. It is totally functional, and the bugs have been worked out. Speaking of bugs, I don't think that there has ever been a piece of software that has been written without bugs. You don't get an MS-DOS version 4.0 or a 1-2-3 Lotus version 3.0 because they were written without bugs or room for improvement! The issue which has to be addressed is, "How well are the problems being dealt with?" For me, this will be the bottom line that will determine the future of the Geneve Computer.

I feel that Myarc is one of the companies which have allowed the TI Community to remain the viable entity that it has been. At the same time, I don't feel that either Lou Phillips or Myarc owes it to the TI Community to support it. The one thing that they do owe any community, which they choose to support is a decent and workable product, and if that product has any imperfections, they owe their customers a speedy and complete

remediation of the problems.

I also admit that the price of some of the enhancements and improvements which we have enjoyed, through Myarc, have come with a cost; the cost was a lack of compatibility. Though I don't own a Myarc disk controller, I understand that it is compatible with only about 90-95% of existing software. All that I can say in regard to this is that there is a price for everything. Total compatibility would be nice and is something to be sought, but finding it is both unlikely and unrealistic. This phenomenon is also not to be found in the world of clones.

THANKS FOR THE SUPPORT!

I would also like to say one other thing about Myarc: It is not another Internation Business Machines; in fact, it isn't either another Texas Instruments, Inc. Rather, it is a small company. From what I understand, Lou Phillips put up his own personal money to subdize the production of the 9640 Computer. We are therefore not talking about big or significant corporate monies. Rather, we are talking about a highly innovative individual with a big dream upon which he is staking a great deal in order to make it into a reality. I, personally, feel both admiration and respect for anyone who has been able to do so much with so little. What Lou Phillips has done is an excellent example of American ingenuity. I am also deeply appreciative of what he has done for me and the entire TI Community. Thank you, Lou Phillips, and all of the people at Myarc.

OPTIMISIM, PESSIMISM, AND REALISM???

Dave Wakely, in his usually perceptive and astute articles, has clearly delineated what he sees as the possible futures of the TI 99/4A and the TI Community. I can only marvel at his intelligence and insight; he truly impresses me with his logic and the ostensible realism of his point of view. Still, I would submit that many of the phenomena which we have seen unfold within the TI Community have not been based in either logic or "realism." We have done what no other computer or computer community has ever done before. What other orphaned computer has had a new and more powerful compatible version emerge? What other computer community has continued to thrive, in terms of both hardware and software, in the midst of such adversity? In other words, we don't do things in predictable ways; we don't function according to the book. We don't necessarily conform to reality, rather, we make our own reality! This is why we have survived, and this is why I believe that Geneve will endure, in spite of the problems and the negative criticisms. I admit it; here, I am talking about FAITH! At the same time, I would caution you, Sports Fans, don't allow yourselves to become cynical, relative to this particular sentiment. As does the human spirit, it too endures.

Speaking of negative criticisms, I would like to say that relative to both the Geneve and the TI Community, these have continued to proliferate. Some of these criticisms are well founded, but I do not feel that it is proper to only present one point of view. To the critics, I urge you to continue. I am confident that we shall endure; we have what survival requires, and it is only through a true "baptism of fire" that we will find our place of respect, in the world of computers. It is just another adversity that will result in the strengthening the fabric of our community. Bring on the antithesis; we Geneve/TI loyalists will provide the synthesis! Just remember, "Da opera ain't over until da fat lady sings!!!" As you can see, I am fully committed to the belief that the resolution of conflicts are useful in that they help to weed out that which is weak or unworthy. What remains will be awesome!

It must be clearly admitted that there exists a small but steady attrition of 4A users. This attrition is occurring from the TI Community to other computers. It has also been my observation that the I.B.M., of a "clone" of it, is the most popular computer for most former 4A users to move to. Some move to this other computer for reasons related to use of this computer in their work environments. I find that a few educators, with 4A's have

invested in the Apple Computer, because this is the computer which is most often being used within many educational environments. A few serious game players have gravitated towards the Atari ST or the Amiga. A couple of others, who are most interested in graphics and computer art, have sought out the Amiga. (At the same time, I don't know of anyone who has moved to a Commiedoor.)

In spite of this attrition, I am convinced that our community can remain strong. The way that this can be done is through the selling of used machines to indivuals who have no computers. By keeping used 4A's circulating, I feel that we can keep our community both viable and alive. I am also convinced that there still exists a significant part of the computer owning population that still has 4A's and that they would use them if only they had access to the proper support. My most recent work as the former membership chairman seems to bear this theory out.

Here, I would also like to predict that there will also be a number of computer owners who will re-buy the TI 99/4A Computer. I predict that these "re-buyers" will probably be those who purchase an I.B.M. "clone" for unclear and amorphous reasons, rather than for work related reasons. I predict that these "re-buyers" will be somewhat disenchanted with their "clones." They will find that educational software will be expensive and difficult to find for their machines. They will also be disappointed in the lack of convenience and ease, which they took for granted with their 99/4A's. Though they will find that there is excellent support for most of the hardware and software for their "clones," they will find that the initial cost of the hardware and the software to be prohibitive; they will find the "fair ware" phenomenon hard to come by. (I herewith challenge any I.B.M. or "clone" user to show me a disk manager or sector editor of the same quality as the ones in John Birdwell's Disk Utilities Program. I used this program for the first time ever yesterday, and it blew me away! I will have more about this program next month; incidentally, it is fully Geneve compatible.) They will experience compatibility problems in both software and hardware, which, heretofore, the TI Community has not experienced to any significant degree. I also predict that they will miss the cohesive support groups, such as this one, as within the I.B.M. Community, there is no need for them. I am therefore predicting a return to "the fold" of those who hope to stray in the direction of the "clone."

Still, I see the main salvation of our community as the 9640, but at the same time, I am forced to admit that the 4A community also wants to be able to deal with programs written for the MS-DOS environment. Well, Sports Fans, again, I am convinced that it's Geneve to the rescue. I understand that Myarc is actively working on some sort of hardware peripheral which will allow full p.c. compatibility; this is an important priority project, for them. We are already seeing the emergence of programs that allow for the transfer of p.c. text files. I predict full p.c. compatibility before the end of 1988. I also predict that when this occurs, it will be the one thing that will convince the more timid and less adventurous members of our community to go for a Geneve rather than a "clone." I therefore say, if you have been contemplating moving in the direction of a "clone," I urge you to wait. There is no cost for waiting, and you may well be happy that you did. I believe that it will be possible for you to have the best of both worlds (the TI and the I.B.M.).

Already, some of the current members of our community have computers other than the 4A. It is also clear that these same persons have fully committed themselves to their other machines, and they do not even use their 4A's, anymore. The logical question is, "Why do they continue to remain in the group and the TI Community in general?" I believe that the answer to this question lies in the fact that these persons have developed many close friendships and associations, as a result of their work with the 4A. They continue to stay with the community simply because there are so many really nice people to deal with. This is very nice, but there is also a danger; it is the danger of the "self fulfilling prophecy!"

What I mean by a "self fulfilling prophecy" is a prognostication, which because of the

respect and the probity of its bearer, is taken to be a literal statement of reality, and is therefore acted upon and adhered to uncritically. As a result of a tacit, subconscious mental acquiesence and acceptance, it truly becomes the reality, of many individuals. (I believe that our beliefs are the basis of our realities.) I therefore want to warn the TI Community, and the Geneve segment, in particular, of the danger of this sort of thinking. We cannot allow ourselves to be swayed by others who are not Geneve owners or those who are not committed to this machine. I would even go so far as to conjecture that there are members of the TI Community who would like to see Geneve die! I feel that it is the only way that some members of our community can internally justify their apostasy relative to the TI 99/4A and the TI Community. The death of Geneve would be the only way for them to validate the correctness of their choice to commit themselves to a "clone" or some other machine. It's nice to be able to say, "See, I told you so!" or "Well, it looks like I was right all the time!" or "I made the best choice!"

As it is clear, the going may be a litle tough for those of us who are Geneve lovers, but I am confident that we shall endure. I am also sure that the TI Community will also endure. We are too strong, and failure is out of the question!

This article has gone on long enough, and I haven't even begun to tell you anything that will help you with your machine. I hope that you will forgive me if I save that for the next issue. I feel that it was important to set the tone of these articles with this initial one. Next month, I will talk about some undocumented commands in M-DOS and in the GPL mode. I shall describe how you can use your Horizon RAM disk to boot your DOS or GPL loader in 3 seconds. I will also talk about modifying your DOS with a sector editor so that it will find your AUTOEXEC file on your Horizon RAM disk. There is also an interesting thing that you can do with the CSAVE program that will give you greater convenience in the GPL mode. I will also talk about how to create your BATCH and AUTOEXEC files in M-DOS or in Myword. I will also continue to make sure that new and updated files, for the 9640, are uploaded to the group's b.b.s. (In fact, just today, I received a package of some of the most current software, for the Geneve from Mr. Jack Riley, the vice-president of Myarc. With his permission, I will be placing these files up onto the group's b.b.s. In other words, I will do everything in my power to support this most estimable machine.

By the way, be sure to get the GIF program and some of the GIF files off of some of the various bulletin boards. This program gives you graphics of I.B.M. EGA quality! (You don't need MByBaBrBtB or any other program to run these files.) Show some of these pictures t
o your friends with "clones" or Amiga's or Atari's, and when you do, be sure to leave the room so that they can cry in both dignity and privacy!

Well, Sports Fans, it looks like ole Krome Dome Jonz has talked too much again. Well, ahm real sorry 'bout dat! I only ask that you allow me the time and the space to wish you all most pleasant holidays. Have a Merry Christmas, a Happy Channuka, a Joyous Solstice, and a Happy New Year!

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Daniel J. Ashley
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December 7, 1987

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RE: The 13 Threads . . . A Ray of Hope

To The Editor:

Dave Wakely's "13 Threads" column in the November newsletter is right on the money. The size of the TI user base must increase. We need new blood! Dave asked for creative ideas on where to get new users, pointing out that we are not likely to convert IBM or MacIntosh enthusiasts.

This made me think of educational software in primary schools. What better way to attract new users! My children's school has a couple of computers for 4th, 5th and 6th graders, and nothing for the lower grades or for preschoolers. When questioned, teachers and school officials state they aren't opposed to computers. But they just don't know much about computers because they aren't hobbyists, they are educators. They simply don't know how to fit them into the curriculum! In short, they aren't really resistant to computers, they are simply unaware.

Is anybody in the TI community aware of educational software reviews, so that I can recommend TI educational software to our school? The reviews should be comprehensive, comparing and evaluating a variety of each type of software (sort of like Anne Dhein's graphics program comparisons in the last few issues of the Chicago TImes). The reviews should separate programs with real educational merit from mere electronic flashcards. In addition, the reviews should be professionally written in educatorese. Recall that most influential teachers and school administrators don't speak english. They speak educatorese, which includes terms such as "reflective logico-mathematical abstraction" and "systematic combinatorial analysis". Reviews written in language directed at the typical computer user are unlikely to be pursuasive.

Unfortunately, I have neither the training nor the orientation to evaluate educational software. For my part, however, I am willing to present software evaluations to my kids' school and work to get the school and teachers to adopt it. I'll buy TIs and software and donate them to my kids'school. (I can use the tax deduction). And I'll spearhead a fundraising drive to send the teachers to a workshop to learn how to integrate the TI into their curricula. Finally, I'll share my experiences and successes with the TI community, so we can do this in other schools.

Is everybody in agreement? Lets do it!

Sincerely,

Daniel J. Ashley

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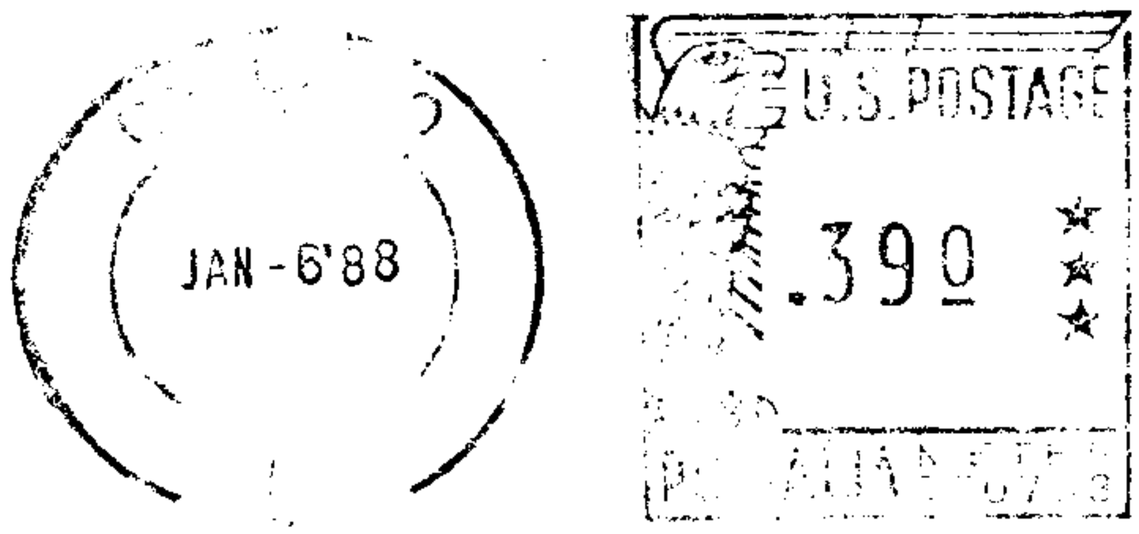

REMarks:

Well, here's another issue that almost wasn't thanks to the Geneve. My machine came back to me after about 4 weeks. The disk drive reading problem was solved and so was the keyboard problem. It seems that the reason that keys kept changing WAS a hardware problem. All the original keyboards may have this problem. Myarc is not using the original company any longer for this reason. So, I had a choice. I could have them send my keyboard to the original keyboard company for repair. But noone knew how long that would take. My other option was to upgrade to the NEW extended keyboard at a cost of $50. I had no choice but to choose the upgrade. And from what I've seen, it does make a big difference. Many of the original problems have ceased to plague my use of the machine. However, as nothing runs smoothly where Myarc is concerned, I have a new problem.

After booting the machine and them MyWord, the machine decides whether it wants to print or not upon being given the print command. If it decides to do it the first time, which it seems to do most of the time, it absolutely refuses to do it again. I have been told this is a software problem but I am using the most current versions of each program in the process that is available. Next week, I will call Myarc to see what their response to this occurance is. And as always, I will let you know in upcoming issues of my progress.

Also, I want to mention one more time the companies of CBUG and Trio+ Spftware. Both these companies have been outstanding as far as supporting the products they sold at the Faire.

Hope to see you all at the next meeting. Best wishes for health and happiness in the new year.